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ABSTRACT

This book presents an in-depth assessment of the concept that excellence can be found in a variety of occupations that do not require a 4-year college baccalaureate degree. The findings are supported by data collected from nearly 40,000 students in occupational programs operating in 361 post-secondary institutions as part of the Counseling for High Skills (CHS) project. The survey was designed to obtain information that would help prospective students make informative career decisions. The data point out that occupations growing at the fastest rate are the ones acquired through 1 to 2 years of post-secondary, career-oriented education. Highlights are presented of career opportunities available to the 70% of high school graduates who are unlikely to earn a 4-year college degree. Chapters 1 and 2 discuss the background of the CHS project. Chapter 3 profiles the students likely to enroll in these programs. Chapter 4 discusses the decision making involved in enrolling in a post-secondary, career-oriented institution. Chapter 5 presents student life at these institutions. Chapter 6 discusses how students rate post-secondary career-oriented institutions. Chapter 7 presents employment experiences of CHS students. Chapter 8 discusses challenges to career development for the future. (Contains 5 appendixes, 81 tables, and 27 references.) (JDM)

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Counseling for High Skills:

RESPONDING TO THE
CAREER NEEDS OF
ALL STUDENTS



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Kenneth Hoyt & James Maxey



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ERIC Clearinghouse on Counseling and Student Services

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**Counseling for
High Skills:
Responding to the
Career Needs of
All Students**

by

Kenneth Hoyt & James Maxey

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Foreword

The Counseling for High Skills Project (CHS) represents one of those rare times where an in-depth and objective assessment is made of a critical weakness in our American education system. A major proposition running throughout this report is that excellence can be found in a wide variety of occupations that do not require a four-year college baccalaureate degree, but do require some kind of education and training beyond high school. Where in our culture have we developed the bias that the only road to occupational happiness and success begins with a four year college baccalaureate degree? Furthermore, this foggy notion has led many people to conclude that anyone not following this road must somehow be considered a second-class citizen.

The findings in this report are supported by a massive amount of factual information. Data were collected from nearly 40,000 currently enrolled students in over 2,100 different occupational programs operating in 361 postsecondary institutions in 14 states. The primary purpose of this research project was to develop solid information from currently enrolled students that could help prospective students make informed career decisions. This study points out that the occupations growing at the fastest rate across the country are acquired through one to two years of postsecondary career-oriented sub-baccalaureate education. Students enrolled in those programs express much satisfaction with their program and optimism about their future.

This report throws some real light on the excellent career opportunities available to the 70% of high school graduates who are unlikely ever to earn a four-year college baccalaureate degree, yet need some education and training beyond high school. We all know of individuals who are unhappy in their work. We also know of individuals who started in a four-year college only to find out this was not their cup of tea and who dropped out after a term or two. This report endeavors to help individuals avoid that kind of slippage and, of course, find a better road to career satisfaction.

Dr. Ken Hoyt, University Distinguished Professor at Kansas State University, is to be commended for developing and leading this research project. He is one of the most respected educators in the country today. Dr. James Maxey, of American College Testing Service fame and coauthor of this report, also deserves commendation for his constant support of this project and for bringing much expertise to the analysis of the data.

This research report should be required reading for anyone involved in a leadership role in public education. Counselors, in particular, will find this report highly useful and motivating in their efforts to help all individuals make better-informed choices regarding their occupational opportunities and related education and training.

Dale Parnell, Professor Emeritus
Oregon State University

Acknowledgments

The data reported in this document have been collected as a result of hard effort and critical thinking by literally thousands of persons. Only a small portion of them can be mentioned here. Each has been selected in part because what she/he did played a truly significant role in the success of the CHS project, and in part because she/he has stayed with CHS from the beginning, continuing today as a CHS supporter.

Dr. Andrew S. Fisher

Currently Senior Program Officer at the Charles Hayden Foundation, Dr. Fisher served as Program Officer for CHS at the DeWitt Wallace-Reader's Digest Fund from 1991 until the summer of 1997. In that capacity, he consistently demonstrated interest in CHS and encouragement of CHS staff members. He made multiple creative suggestions for improvements in CHS operations, but he never insisted his suggestions should be followed. He was especially helpful in Years 2 and 3 of this project, when it became necessary to make major changes in project goals and activities. When the need for major changes became apparent, he participated actively in devising the best ways to make the needed changes. His interest and concerns regarding CHS continue today.

Dr. Samuel Halperin

Dr. Halperin, Co-Director, American Youth Policy Forum, must be the second person to be recognized here. It was Dr. Halperin who first recommended to senior officials at the DeWitt Wallace-Reader's Digest Fund, that they consider making a grant to K. B. Hoyt. Had Dr. Halperin not made that recommendation, it is highly likely that the CHS project would never have existed. In addition to making that recommendation, Dr. Halperin has also responded helpfully on several occasions when the CHS project director asked for his advice. He has contributed both in terms of his interest and in terms of his expertise.

Dr. Michael C. Holen

Dean of the Kansas State University College of Education, Dr. Holen served as Chief Financial Officer for CHS during the entire project. In this role, he assumed responsibility for negotiating with the DeWitt Wallace-Reader's Digest Fund in terms of both operational expenses and overhead. Since termination of CHS on June 30, 1998, Dean Holen has continued allowing the Project Director to work on CHS even though his salary now comes entirely from KSU funds. He has also assigned a secretary to CHS with specific responsibility for working on this report. CHS would not exist today were it not for Dean Holen.

Dr. Dale Parnell

Currently serving as Distinguished Professor of Education, Emeritus at Oregon State University, Dr. Parnell has been especially helpful to CHS in three crucial ways. First, he has made significant contributions to developing the conceptual base for CHS. Second, he has played a key role in gaining support for and participation in CHS among community colleges. Finally, he has participated actively as a member of the CHS National Advisory Board. During the entire period of CHS operations, Dale Parnell has been one of its best, most persistent, and most effective supporters.

Ms. Nancy Perry

Nancy Perry, former Executive Director, American School Counselor Association (ASCA), has been involved with CHS longer than any other professional school counselor. She was instrumental in suggesting a number of the critical components of the CHS planning grant. She was—and continues to be—active in maintaining ASCA as the prime professional partner of CHS. Thanks to her, partnering with CHS is now official ASCA policy. When it came time to name the state ASCA divisions that would participate in CHS, Ms. Perry played the lead role in recommending states to be invited. ASCA continues to support CHS in spite of the fact it has never received any CHS funds. This can be attributed largely to Nancy Perry. So, too, is the interest and support for CHS voiced by both the ASCA board and ASCA state presidents.

Two other members of the CHS National Advisory Board must also be acknowledged here:

Dr. David Livers

Professor of Education Emeritus, Illinois State University, Dr. Livers has been especially helpful in convincing individual postsecondary institutions to participate in CHS. His expertise in handling CHS data has been of great help on many occasions.

Dr. Joann Chenault

Professor of Education Emeritus, Southern Illinois University-Edwardsville, Dr. Chenault has made especially valuable contributions in suggesting ways CHS should reach out to adults in a variety of community settings. As professional persons who had extensive experience working in the Speciality Oriented Student Research Program (SOS) during the 1960s, both Dr. Chenault and Dr. Livers bring valuable perspectives to the discussion whenever the CHS National Advisory Board met.

Three national exemplary efforts were headed by persons who must be recognized here. One is the national exemplary effort aimed at involving state associations of private career institutions in CHS. This activity, carried out in Arizona, was spearheaded by Mr. James Cox, former Executive Director, Arizona Private School Association. The second national exemplar was designed to demonstrate how a comprehensive CHS project could be developed and carried out in the geographic area served by a single school district. This project, carried out at Gateway Technical College, Racine, Wisconsin was headed by Mr. Kurt Lehrman, Vice President for Student Services at that institution. It involved making a special computer disk distributed to counselors within a 25-mile radius containing information about educational programs at Gateway Technical College. The third national exemplar was designed to use state tech prep funds to initiate a statewide CHS project involving both school counselors and all postsecondary sub-baccalaureate institutions in the state. This exemplar was carried out in Tennessee under the direction of Dr. Ken McCullough, Assistant Vice Chancellor, Tennessee Board of Regents. The involvement of publicly supported postsecondary vocational education institutions was an added bonus to this important effort.

CHS professional staff members—including Fred Bradley, Judy Hughey, and Ken Hughey—participated productively in CHS from initiation of the planning grant until the end of the CHS Project on July 1, 1998. Each has gone far beyond what would be considered a reasonable amount of professional concerns and activity. Several of the most popular current CHS publications—including *CHS Counselor Education Unit* and *CHS Parent Manual* are their productions. Each has established and maintained contacts with several participating ASCA state divisions. Many of the changes that have been made in CHS operations over the years have originated with these staff members. To say CHS could not have been a success without them would be an understatement.

Several groups of persons exist whose individual members have made valuable contributions to CHS. The single most valuable group consists of the 14 state CHS coordinators appointed to this post by the ASCA state division president in each participating state. In each participating state, the CHS state coordinator has been responsible for convincing postsecondary institutions to participate and to identify specific programs in each institution where data are to be collected. Each CHS state coordinator has built and maintained good working relationships with (1) the ASCA state division; (2) CHS headquarters; and (3) participating postsecondary institutions in the state. On many occasions, the CHS state coordinator has taken responsibility for encouraging a variety of organizations and institutions to work together. On numerous occasions each year, state coordinators have been faced with a series of operational problems. They have come through time after time in resolving such problems in ways acceptable to all involved. Of the 20 CHS state coordinators, 9 served in this capacity during the entire period CHS existed in the state. Hundreds and probably

thousands of hours of volunteer time have been donated by these persons. They, more than any other group, have kept CHS alive and well. Included in this group are:

- Arizona: Claudia Roels, John Pavlich
- Colorado: Connie Long, Dr. JoAnne Gearhart
- Florida: Dr. Nilda Diaz
- Iowa: Paula Crandell
- Kansas: Paulette Brunskill
- Maine: Deborah Drew
- Missouri: Bill Sevier
- Nebraska: Billie Golner, Corky Forbes
- North Carolina: Cheryl Novak
- Pennsylvania: Dr. Diane Serafin
- Texas: Carolyn Madewell, John Shirley, Anne Ferguson
- Washington: Joni Sherman, Dr. Duane Richardson
- Washington, D.C.: Beulah Smith
- Tennessee: Jill Eatlerly

Other groups whose contributions have been great are state associations of community colleges and private career institutions. In the case of community colleges, CHS has received very valuable help from Dr. David Pierce, President, American Association of Community Colleges. In the case of private career institutions, equally valuable help has been provided by Dr. Omer Waddles Executive Director, Career College Association and by Mr. Walter Biddle, Executive Director, Career Training Foundation. Dr. Pierce, Dr. Waddles, and Mr. Biddle have, in addition to helping CHS obtain participation by individual postsecondary institutions, provided extremely important advice and suggestions to CHS personnel.

It is both proper and important to recognize and thank the approximately 6,000 practicing school counselors who, to date, have participated in professional development sessions aimed at making them both knowledgeable and supportive of CHS. These thanks go especially to the more than 2,300 school counselors who have been provided with CHS computer disks and to the 486 school counselors who have actually used the CHS computer disk for their state and reported back to CHS their judgments regarding the value of these materials.

Ms. Barbara Nickles (Dr. Hoyt's niece) is gratefully acknowledged for her many contributions.

Finally, the extraordinary high quality and valuable contributions of Lori Duncan must certainly be acknowledged. Lori has been responsible for making every page of this document ready for the printer. She has typed every word of this manuscript through multiple revisions and every table—including all of those in the Appendixes. In all of this, she has demonstrated her professional competence and commitment to making sure the manuscript was printed in an accurate and attractive manner. She has truly been invaluable.

Even with the contributions of all these persons and organizations, it is clear we are far from being able to assert we have data from a true random sample of students enrolled in post-secondary career-oriented sub-baccalaureate programs and institutions in the United States. Still, the 40,000 students whose opinions and judgments are recorded here represent a large enough segment of this population to deserve distribution and study. It seems unlikely these data would change drastically had a truly national sample been used.

Preface

The purpose of this book is to provide career counselors and others with data and action recommendations aimed at helping them contribute to the career development of the 70% of persons expected never to attain a four-year college degree. We contend that almost all of these persons will need some kind of specific career skills acquired at the post-secondary sub-baccalaureate level if they are to participate successfully in the primary labor market currently emerging in the Information Age. The goal is to gather and report data in such a way that they can be delivered to these persons in a counseling—not just a recruiting or marketing—mode.

The data found in this document were collected primarily during operation of a grant entitled Counseling for High Skills (CHS). This grant, made to Kansas State University by the DeWitt Wallace–Reader’s Digest Fund, operated from October 1992 until July 1, 1998. During that time, CHS collected initial data from 39,940 postsecondary students enrolled in 2,145 programs in 361 postsecondary institutions in 14 states and the District of Columbia. CHS follow-up data have been collected and processed from 9,524 former students. Grant funding (including a \$351,469 planning grant) totaled \$3,492,970. On July 1, 1998, CHS became an operational program of ACT, Inc., in Iowa City, Iowa.

CHS is clearly a “let’s listen to students” type of research effort. This approach was taken primarily because of other research indicating the strong influences of peer judgments upon career decisions made by youth (Herr & Cramer, 1996). The CHS data verified the importance of peer influences; it was discovered that 30.6% of students first heard about the institution they were attending from friends—in contrast to the percentages who first learned about it from a high school teacher (5.9%), high school counselor (7.0%), newspaper or magazine ad (5.4%), TV or radio (5.6%), institutional representative (6.3%), or parent/guardian (9.7%). We wanted data that would be maximally successful in encouraging persons to decide whether or not to attend CHS-type institutions. We concluded that the best data available to us for achieving that purpose were self-reports from current and former students based largely on answers to questions where students are the “experts.”

Student self-reports obviously don’t necessarily represent the “truth.” That does not keep prospective students from believing such reports are valid. That is why CHS data-collection procedures call for a strong plea that current students give only honest, truthful answers to each question in the data collection instrument. If a prospective student believes the data are truly valid, he/she is likely to rely upon them. If large percentages of current students report a certain condition to exist (e.g., “most of the equipment is in good working condition”) it is likely to be true.

The view taken here is that student self reports, while not sufficient for use in reporting student experiences or judgments, are necessary in both describing

and evaluating the institution. Certainly they should be useful in counseling. In addition, student self-reports are properly viewed as a potentially valuable component of both external evaluation and internal institutional self-study. A "let's listen to students" approach does have a place in American education.

Prologue

Counseling is an essential component of an education in today's world. It is especially important that it be made available to and used by all students. However important this need may be, counseling is clearly not as readily available and used by students needing counseling focused on acquiring "high skills" as students headed toward college. This book helps to redress the balance by offering assistance to students through a viable approach developed by Dr. Kenneth Hoyt. Based on an extensive and intensive research program which stretched over many years, *Counseling for High Skills: Responding to the Career Needs of All Students* has an empirical base that few other programs can equal. Research clearly substantiates that it is an effective program.

ERIC/CASS is delighted to publish Dr. Hoyt's and Dr. James Maxie's compelling monograph. We are especially pleased to offer this publication as a highly useful resource that will assist counselors in meeting the career counseling needs of all students.

Garry R. Walz, Ph.D. NCC

Co-Director, ERIC/CASS & Professor Emeritus University of Michigan

Chapter I

Background: The Counseling for High Skills Project

The Counseling for High Skills Project began with a phone conversation between Dr. Andrew S. Fisher, Program Officer, DeWitt Wallace–Reader’s Digest Fund and Dr. Kenneth B. Hoyt, University Distinguished Professor, Kansas State University, on November 25, 1991. In that phone call and subsequent letters, they agreed that (1) the emerging Information Age will require workers with specific career skills acquired at the postsecondary level, and (2) a critical need exists to provide today’s professional school counselors with the information and expertise required for helping almost all high school leavers—not just those headed toward four-year colleges—make various kinds of postsecondary education and career decisions.

Based on these agreements, the DeWitt Wallace–Reader’s Digest Fund awarded Kansas State University a \$353,000 planning grant in October 1992. This was followed by a \$3,138,970 demonstration grant beginning in December 1993 and ending (including two no-cost extensions) on June 30, 1998. The official name of the project was Counseling for High Skills: Vo-Tech Career Options. Shortly after the demonstration grant was awarded, the name of the project was changed to Counseling for High Skills (CHS). This change was made because, conceptually, the implementation procedures developed are applicable to all types of postsecondary education, even though the project is limited to vo-tech career options.

In addition to this name change, several other major changes have taken place as CHS evolved during the 1992–1998 period. By discussing each of these here, we hope to provide the reader with a better understanding of the nature and goals of CHS.

Relationship of CHS to the Specialty Oriented Student Research Program

The rationale behind CHS grew directly from that used in developing the Specialty Oriented Student Research Program (SOS) at the University of Iowa in 1962. That rationale was based, in part, on objections to Title V of the National Defense Education Act of 1958 which called for school counselors to identify and help "intellectually able" students. Such an emphasis was unacceptable to those counselors and counselor-educators who operated under an assumption that counseling opportunities should be provided to *all* youth, not just to the "intellectually able" (which was interpreted by most persons to mean those youth likely to attend four-year colleges).

In part, the rationale for SOS was based on a wide variety of mostly unpublished literature emphasizing the emerging need for many workers to acquire career skills at a higher level than can be mastered at the K-12 level of education. Even then, it was clear that skills acquired at the secondary school level, while *necessary* for many persons, will not be *sufficient* for success in many occupations.

Finally, CHS and SOS shared a common interest in and commitment to a "customer satisfaction" approach to judging the appeal any postsecondary educational institution holds and how that influences enrollment decisions made by prospective students. We reasoned that prospective students considering enrollment in a particular institution would be more apt to trust reports provided by current students at that institution than to any other information source. Peer judgments of current students are a powerful influence on judgments regarding institutional worth.

To do this, both SOS and CHS built data collection instruments and procedures based on self-reports of currently enrolled and former postsecondary students. It was reasoned that, if their peers who had enrolled in postsecondary career-oriented education programs reported favorably on their educational experiences, more high school students would be likely to seriously consider enrolling in some kind of postsecondary educational program.

Both SOS and CHS recognized from the beginning that most high school students and their parents are firmly convinced that a four-year college degree is the "best" kind of postsecondary education, thereby making any other choice second best. Thus, the initial task was to produce data showing other kinds of postsecondary education in a positive light. When the question "Is this a good institution?" is asked, the goal of both CHS and SOS was to answer by asking "For whom?" We wanted to be able to help prospective postsecondary students consider a variety of *kinds* of postsecondary educational institutions and then pick the kind best for them.

Operating primarily through a combination of fees charged to participating postsecondary institutions, SOS operated from 1962 until 1974. During that period, data were collected from more than 30,000 postsecondary students

enrolled for the most part in proprietary institutions (there were no community colleges in Iowa at that time) and distributed to counselors by the University of Iowa. In 1969, the SOS program was moved to the University of Maryland. In 1974, SOS had to be dissolved because its director, Kenneth Hoyt, accepted a federal government position as director of the Office of Career Education, U.S. Department of Education.

Items to be included in SOS data-collection instruments were constructed primarily by listening to tape recordings of counselor interviews with high school students contemplating attendance at some postsecondary career-oriented institution. Most of the questions asked by these students centered around the broad topic "What's likely to happen to me if I enroll in this program at this institution?" Two types of student questions were discovered. One type consisted of factual questions, e.g., "What is the tuition charge here?" "When do classes begin?" The institution, not its students, is the "expert" in answering such questions. For the most part, both CHS and SOS avoided asking such questions.

On the other hand, both SOS and CHS concentrated on student-perception types of questions; namely, those items where current or former students in a particular postsecondary educational program could properly be considered to be the "experts" in answering. Examples of such questions are, "How much do students have to study to get along here?" and "How available are instructors to answer questions students want to ask them?" Students know the answer to such questions better than anyone else.

For the most part, items where institutional personnel (e.g. faculty and administrators) were properly viewed as the experts in answering-were not included in SOS or CHS data collection instruments. For example, a question such as "How many books are in this institution's library?" would *not* be one students would be asked. Instead, *institutional personnel* would be considered the experts in answering this question. On the other hand, *students* might appropriately be asked, "How hard is it for students to check materials out of this institution's library?" Here, *students*, not the institution, would properly be viewed as the experts in answering the question. Most CHS items are "students-are-the-experts" questions.

This is not to say, of course, that factual answers supplied by the institution to questions raised by prospective students are any less valid than perceptual answers supplied by the institution's current or former students. Both kinds of answers may be equally valid *assuming they are answered by the expert*. Some prospective students can be expected to ask questions such as:

- What is the tuition charge for this program?
- When do classes start, and when is this program due to end?
- Do academic entrance requirements (such as possession of a high school diploma) exist?
- What kinds of student loans are available?
- Is this institution accredited? By whom?
- Does this institution offer scholarships for its students?

We would look to the *institution* to serve as the expert in answering such questions. If, on the other hand, prospective students ask questions such as:

- How easy is it for students to get a student loan while enrolled at this institution?
- How much trouble is it for students to find housing somewhere near the institution?
- What kinds of jobs do graduates from this program typically find?
- How do current students rate this institution in general? How do they rate the faculty?
- How easy is it for students to get individual help from instructors when they need it? How good is the kind of help they receive when they ask for it?
- Can students depend on this institution for help in job placement after graduation?

We would look to present and former students to serve as experts in answering these kinds of questions. It is important that prospective students be able to find good answers to both questions where the institution is the expert and questions where current and former students are the experts. Both are necessary. Neither by itself is sufficient.

Finally, both SOS and CHS shared a common goal of reporting data in such a way that they can be easily used in *counseling* not just in *recruiting* prospective students who are considering enrolling in specific programs in specific postsecondary institutions. In order to do so, data were classified in terms of possible specific answers to a number of broad questions asked by prospective students. In SOS, the broad questions included:

- What kinds of students enroll here?
- What about housing?
- What about costs?
- What about part-time jobs while enrolled?
- How do students rate this program?
- What about finding a job after finishing training?

In CHS, the broad questions included:

- What kinds of persons would I find as classmates?
- How accurate was the information received before enrollment?
- How are current students finding funds to pay for their education?
- What's it like to be a student in this program in this institution?
- How do current and former students rate this program in this institution?
- What kinds of employment experiences are former students finding?

With the high similarity in the broad questions being asked, it was not surprising also to find a high degree of similarity in the data collection instruments themselves. In both the SOS and the CHS project, data were organized in terms of answers to a number of smaller specific questions some students might raise in asking these broad questions. As a result, counselors can usually find data related to answering specific questions raised by specific prospective students during counseling.

Relationships Between CHS and the American School Counselor Association (ASCA)

Even before the CHS planning grant was awarded in 1992, serious conversations regarding the need for CHS and for involvement of school counselors in that effort took place. These conversations involved primarily Ms. Nancy Perry, then ASCA president, and Kenneth Hoyt. When the CHS planning grant was received, one of the first steps taken was to form the CHS National Advisory Board and to name Ms. Perry as a board member.

Because CHS was awarded a demonstration grant, it was not feasible to operate a CHS effort immediately in all 50 states. Instead, the CHS National Advisory Board decided to try working with a sample of 14 ASCA state divisions. Board members selected the following 14 states to invite as participants in the CHS demonstration grant: Maine, Pennsylvania, North Carolina, Florida, Texas, Arizona, Washington, Colorado, Nebraska, Iowa, Missouri, Kansas, Tennessee, and the District of Columbia. Contacts with the ASCA state division president in each of these 14 states revealed that all were interested in participating in CHS. Each participating ASCA state division president was asked to secure a formal partnership agreement with CHS and to appoint one ASCA state division member to serve as a CHS State Coordinator. 13 of the 14 ASCA state divisions were able to take these actions quickly. The only one unable to follow through immediately was the Tennessee School Counselor Association, which became an active participant about one year later.

The major duties of the CHS state coordinator varied greatly from year to year. During the planning grant year, each coordinator was asked to identify the postsecondary career-oriented sub-baccalaureate institutions in the state and convince each to participate in CHS on a continuing basis. For each institution agreeing to participate, the coordinator asked for a list of programs that enrolled 15 or more students under age 25 at that time. In some states, these data were collected by the state coordinator during visits to each institution. In other states, data were collected from reports turned in by each institution to the State Department of Education. Using these data, it was estimated data would be collected from 49,570 students during Year 1. That estimate proved to be very wrong. The data collected only through search of State Department of Education files turned out to be inaccurate in many places.

During Years 1 and 2, state coordinators worked with 903 school counselors who had agreed to serve as CHS data collectors under an arrangement where each data collector received \$100 for each day spent in collecting data. By the end of Year 2, data had been collected from 20,431 students enrolled in 1,137 programs in 270 postsecondary institutions—less than half the number of students identified by the state coordinators as likely participants. This is a good example of the shortcomings of data collected during the planning year, not due to any fault of the state coordinators.

During Years 3-5, each state coordinator worked primarily on efforts aimed at helping counselors learn how best to use the computer disk containing data for that state and arranging for distributing copies of the disk to those counselors who had participated in a professional development session on how to use it.

The CHS state coordinator in each participating state reported directly both to the ASCA state division president and to the CHS staff member assigned to work with that state. He/she also served as the prime CHS contact person for all participating postsecondary institutions in the state and for school counselors who had questions regarding CHS. In addition to reimbursement for travel expenses, each CHS state coordinator received an annual consulting fee of \$2,000 from CHS. When the CHS grant expired on June 30, 1998, several CHS state coordinators continued to function as volunteers.

Relationships Between CHS and ACT, Inc.

ACT, Inc., first became involved in CHS in 1992 during operation of the CHS planning grant. An early CHS activity was to invite major educational processing organizations to propose how they could help in processing and reporting CHS data. The proposal received from ACT called, among other things, for CHS data to be reported back to school counselors on computer disks rather than on paper. Because of the need to revise CHS data distributed each year and the need to have easy access to data while counseling students, this idea appealed greatly to CHS planners. In addition, ACT proposed including a special module of each state's computer disk for use by undecided students in career exploration. This special section — adapted from Project DISCOVER—also appealed greatly to CHS. As a result, it was decided to contract with ACT, Inc., for processing and reporting CHS data.

From the beginning, ACT staff members under the leadership of Dr. James Maxey, Assistant Vice President for Research, have worked as partners with CHS staff persons. ACT personnel have contributed to several CHS document needs. These include contributions to (a) revising CHS data collection instruments and data collection manuals, (b) participating in counselor professional development conferences aimed at showing counselors how best to use CHS computer disks, and (c) preparing CHS documents related to institutional self study.

Perhaps most significant has been ACT leadership in conducting CHS Employment Survey projects aimed at collecting and processing follow-up data from former students. By the end of Year 2, CHS had been able to collect follow-up data from only 1,666 former students. Beginning in Year 3, ACT assumed responsibility for collecting and reporting CHS follow-up data. By the end of Year 5, usable follow-up replies had been received from 9,524 former students.

In order to accomplish this, ACT pilot-tested four follow-up procedures:

1. Offering to pay respondents \$5 for returning the form
2. Enclosing \$1 with the form as a "thanks in advance" payment
3. Establishing a statewide lottery paying \$100 to the winner
4. Creating a standard follow-up survey simply asking for replies

When ACT studied results of these four approaches, it was clear the lottery approach produced the highest return rate at the lowest cost.

Now that the CHS project grant has formally ended, ACT, Inc., is operating the total CHS operation as a not-for-profit business.

Major Changes in CHS Data Collection and Processing

Data collected by CHS state coordinators during the planning year led to a prediction that, during Year 2, initial data would be collected from a population of 49,570 currently enrolled students. Yet, by the end of Year 2, initial data had been collected from only 20,431 of these students and only 903 school counselors had actually participated in the data-collection process. With each of the 903 counselors receiving a \$100 fee for their participation, it was clear CHS could not afford this data-collection approach.

This led to a major change in data-collection operations during Years 3–5. Instead of asking school counselors to conduct the data collection sessions, each participating institution was asked to collect its own data using a CHS Data Collector Manual. School counselors were no longer asked to serve as data collectors and the data were no longer regarded by most of them as "theirs." An opportunity to test the effects of this change occurred in Year 4 when data related to counselor intention to use the CHS data were collected during professional development sessions designed to help counselors learn how to use the CHS computer disks.

Two categories of counselors attended these sessions: counselors who had served as CHS data collectors sometime during Years 1 or 2 and counselors who had never participated in a CHS data collection session. All of these counselors were asked to complete a short form asking about their intentions with respect to participation in CHS. Included were questions asking counselors to mark their intention to:

1. Visit one or more participating institutions
2. Invite institutional representatives to visit their high school
3. Use CHS materials with high school students and
4. Discuss CHS materials with parents.

The percentage of counselors reporting an intention to participate in CHS in each of these four ways is provided in Table 1.1.

Table 1.1
Percentage of Counselors Who Reported Intentions
of Engaging in CHS Activities Next Year

Intention	(%) Data Collectors	(%) Non-Data Collectors
Visit one or more institutions	81	60
Invite institutions to visit your school	78	68
Use CHS materials with students	89	84
Discuss CHS materials with parents	49	35

Data reported in Table 1.1 make it clear that counselor intentions to participate in CHS in various ways are related to whether they participated in one or more CHS data collection sessions. It seems to have had little effect in terms of counselor intentions to use CHS materials with high school students but, on the other three possible actions, counselors who had participated in data collection were more likely to intend to become involved in CHS than counselors who did not participate.

In an attempt to ensure data were collected in a carefully standardized manner, a new *CHS Data Collector Manual* was produced. Included in this manual was a document to be read to students whenever CHS data were collected. That document strongly emphasized that the purpose of CHS was to help prospective students decide whether or not this program would be a good choice for them. Further, it included a statement that in completing the CHS Student Survey, students were not being asked to either help or harm the institution. It appears that, so far, present and former postsecondary students completing CHS data collection instruments are taking the request to provide honest answers seriously. This has almost always been confirmed when focus groups are held with students immediately after they have completed the initial data collection instrument.

The importance of asking currently enrolled students to help former students make decisions concerning enrollment in participating institutions cannot be overemphasized. Had current students not believed they were supplying such help, it is doubtful many would have agreed to answer the 137 items in the CHS Student Survey. Since CHS data are collected based on such an appeal to currently enrolled students, it is imperative that conscientious attempts be made to distribute these data to prospective students. That is why the CHS policy is to distribute data collected each year free of charge to professional career counselors and to show counselors how to use these data in helping prospective students in the decision-making process.

Second, a decision was made to collect data from all students present, not just those under age 25. Reasons for this change in policy were as follows:

1. Instructors in participating programs were having difficulty splitting students in terms of those under versus over age 25. Instructors typically don't have these records.
2. Limiting programs where data are to be collected to those enrolling only 15 or more students under age 25 meant that, for most institutions, only a minority of their programs could serve as data collection sites, thus giving a biased picture of institutional offerings.
3. If only students under age 25 participated in data collection, the institution was faced with problems regarding what to do with students age 25 or older during the data collection period.
4. CHS data were collected only for students under age 25, the resulting data had only very limited use for comprehensive institutional self-assessment.

To study these kinds of concerns, data collected from 38,325 postsecondary students prior to January 1, 1997, were examined in terms of 91 items included in the CHS Student Survey. Only 19 of the 91 items resulted in modal differences between students under age 25 versus all students. Thus, it was concluded that, for practical purposes, only one computer disk per state was necessary (rather than one for students under age 25 and another for students age 25 or older). This new procedure has made it much easier for institutions to collect their own data. It has also greatly increased the potential for use of CHS data with students age 25 or older and for institutional self-assessment.

Third, a decision was made to change data collection procedures to include all students, not just those in the second year of a two-year program. The original reason for asking institutions to collect data only from students in the second year of their program was to allow follow-up data to be collected sooner. When this was done, it was discovered that usually only a few students from each of a number of programs would participate, thus greatly reducing the number of participating programs. The goal had to be one of increasing the number of usable replies for each program.

To test the feasibility of making this data collection change, a separate comparison was made, using the first 111 items in the CHS Student Survey, between the modal responses of (a) students in two-year programs who had been enrolled for no more than 12 months and (b) students in two-year programs who had been enrolled for 13 months or more. Of these 113 items, the modes for these two groups were the same for 109 items. Based on this finding, it was concluded that data being collected from all students in either their first or second year could safely be combined with earlier data collected only from students in the second year of a two-year program. There is no need to change this component of data collection.

Use of CHS Data in Institutional Self Study and Evaluation

Since CHS calls for data to be collected from present and former students enrolled at participating postsecondary educational institutions, it was essential that such institutions cooperate and participate in CHS data collection activities. The initial reason for participating given to postsecondary institutions was that doing so would help school counselors better counsel their students regarding postsecondary attendance. The obvious assumption was that this should result in institutions getting more and better students. The task of validating this assumption will obviously require a multi-year effort whose results will not be known for several years.

Some postsecondary institutions were motivated to participate in CHS simply because they saw counselor involvement in data collection as a good vehicle for encouraging counselors to visit their institutions. When the change was made from having counselors collect data to asking each institution to collect its own data, that motivation apparently largely disappeared. How to rekindle and increase that kind of motivation remains an important challenge to be met.

The need for continuing participation on the part of postsecondary institutions is based, in large part, on the related need to re-collect CHS data on a regular basis so it can be kept up to date. Under current CHS operational procedures, each participating institution is asked to pay an annual fee to cover the data re-collection costs. In the absence of any immediate institutional benefits, many institutions were reluctant to continue participation in CHS. In an effort to provide institutions with more obvious and more immediate benefits, CHS decided in 1997 to initiate a major new effort to help institutions use CHS data on customer satisfaction in institutional self-study and evaluation.

The concept of customer satisfaction has been used successfully by the private sector for many years. It currently is being strongly supported as an important component of institutional self-study and assessment. Many CHS items ask students to indicate their evaluative opinions regarding the institution. Moreover, existing CHS data have been collected under conditions that maximize student motivation to provide honest and valid judgments. There is no need to collect new data in order to study customer satisfaction among students in participating institutions. Existing CHS data can be used for this purpose.

A customer satisfaction, "let's listen to students" approach to institutional evaluation is gaining in popularity at the present time. Used properly, a customer satisfaction set of data can—and should—function as an important component in the evaluation process. Few would contend that "let's listen to students" data are a sufficient basis for institutional evaluation, but that doesn't mean they are unnecessary! The key, as discussed earlier, is to ask customer satisfaction questions only for those topics where students, not the educational institution, can properly be considered to be the expert in answering. There obviously will be many places where institutional self-study will be dependent on expertise of the institution's staff rather than its students. In such instances, it would be a

mistake to count on student self-reports for valid answers.

Any institution can use CHS data for institutional self-study simply by observing the percentage of respondents choosing each percentage/response for each item. This fact should be capitalized on, not ignored. Those students whose responses differ much from the modal responses may be in need of some kind of special attention. Using CHS data in institutional self-study is one way of identifying such students.

The greatest contributions CHS data can make to formal institutional self-study and evaluation lie in the fact that exactly the same data are collected in exactly the same way for each classification of persons being studied in each setting. This makes possible the assembly of a large number of comparison groups, each of which can be studied from "which is most?" and/or "how do they differ?" points of view. This would not be possible with other evaluation procedures calling for different instruments, different data collection procedures, and different reporting practices for different subpopulations. Examples of possible kinds of comparisons include:

1. **All data in Program X compared to all data in Program Y.** (For example, "How do responses of students in the Auto Mechanics Program compare with those of students in the Licensed Practical Nurse Program at this institution?")
2. **All data in Program X compared to all data in Institution A.** (For example, "How do responses of students in the Air Conditioning and Refrigeration Program compare with responses of all other students from whom data were collected at this institution?")
3. **All data in "Institution A" compared to all data in Institution B.** (For example, "How do the composite responses to each item given by students from whom data were collected at Rosewood Community College differ from the composite responses given by students at Sherwood Community College?")
4. **All data in Institution A compared to all data in State A.** (For example, "How do job placement rates for students in Bryan Technical Institute differ from job placement rate composites for all students from whom data were collected in this state?")
5. **All data in State A compared to all data in State B.** (For example, "How do student ratings of instructors in Arizona differ from student ratings of instructors in Iowa?")
6. **All data in State A compared to all data collected nationwide Composite.** (For example, "How do ratings of institutional recruiting personnel by students in Iowa differ from those of the national sample of students?")

The ability of any organization to make the kinds of comparisons possible here is obviously dependent on the willingness of those for whom comparisons would be made to share their data with others. The more programs and

institutions participating in data collection within a given state, the more kinds of comparisons can be made. For example, in a state where only one postsecondary institution is participating, it will be impossible to collect statewide data. Similarly, if, for example, only 3 of 34 programs offered at a given institution participate in data collection, it would be impossible to get an overall institutional score. The theoretical ideal is for CHS to find all programs in all institutions in all participating states. It appears it will be many years before that ideal can be met.

Step-by-step directions for making comparisons can be found in a document published by ACT, Inc., entitled *Using CHS Data in Institutional Assessments: A Guide For Administrators*.

Use of CHS Data in Counseling

As participating institutions consider ways of using CHS data, it is vitally important that they keep clearly in mind the need to make these data available for use in career counseling of persons considering enrollment in some kind of career-oriented postsecondary institution. This is essential if we are to be true to the expectations of current and former students who complete the CHS data collection instruments. As we said earlier, currently enrolled students were told the data they supplied would be used to help answer questions raised by prospective students. Because of this, it seems reasonable to assume currently enrolled students tried to answer each item honestly. It is important not to let these students down by failing to use CHS data in this manner.

There are four basic kinds of student problems in which CHS data are especially suitable for use in individual and group counseling. First, increasing numbers of high school students and adult displaced workers are becoming interested in discovering whether some form of postsecondary sub-baccalaureate education would be appropriate for them to consider at this point in their career development. Here, CHS data—especially data related to postsecondary students' evaluation of their educational program and their post-education occupational experiences can be extremely helpful to people seeking to plan their futures. Much of this can be done while working with students in groups.

Second, many potential postsecondary students become convinced that, if they are going to seek postsecondary education of any kind, it would have to be done (primarily for financial reasons) at a publicly supported career-oriented technical institute or community college. They have already made the decision to attend a particular institution. Now their operational counseling problems center around trying to select, from the total array of programs being offered at this institution, the program that is of most interest to them.

Third, some prospective postsecondary students have already made a firm decision regarding the occupational specialty for which they want to seek postsecondary education. Their operational problem is that of discovering which of the several postsecondary educational institutions available would be best

for them. Here direct comparisons of CHS data collected from students at each institution under consideration can be of significant help. This is one of the areas where the standardized data collection procedures utilized by CHS can pay rich dividends in terms of allowing prospective students to compare institutions objectively.

Finally, there are very large numbers of persons who are well aware of their need for some kind of postsecondary career-oriented education. Their decisions do not center around whether they should elect to enter some form of postsecondary education. Instead, their counseling problems center around choosing a career field. These students can receive considerable help comparing CHS data for a variety of educational institutions they think might be appropriate for them. By doing so, they can narrow their choices under consideration to a considerable degree.

In all four of these kinds of counseling problems, CHS data can be useful. Preliminary evidence obtained to date make it clear that CHS data are considered useful by both prospective students and professional counselors charged with helping them in career development.

Concluding Remarks

The historical background both of the Specialty Oriented Student Research Program (SOS) and the Counseling for High Skills Program (CHS) has involved collecting data from more than 60,000 postsecondary students enrolled in career-oriented programs at the sub-baccalaureate level. While far from sufficient for use in understanding how persons make decisions regarding their possible enrollment in these kinds of programs, these data represent a viable beginning that deserves serious study and consideration. The remainder of this book concentrates on sharing data and understandings derived to date, primarily from postsecondary students participating in the CHS program.

Current Operations of the Counseling for High Skills Program at ACT, Inc.

Since September 1998 ACT, Inc., has been making CHS available to institutions in selected states. Efforts have been made to work with the Board of Regents, the Board for Higher Education, or the State Department of Education in each state to publicize how CHS data can be useful for assessing student satisfaction and gaining valuable information for policy research. The decision to work primarily with state-level agencies rather than with specific institutions in spreading the use of CHS is based on two reasons. First, in order for CHS data to be maximally useful for counselors, it is important that most, if not all, eligible postsecondary institutions in the state be represented in the database. Second, it is not practical to visit every single eligible institution to secure their participation in CHS. Being able to assess student satisfaction

enables state-level agencies to be responsive to the requirements of Perkins legislation as well as Workforce Investment legislation. Indeed, some of the states that have elected to use CHS on a statewide basis have funded CHS using Perkins money available to the state.

Based on our experience with CHS during its development, some revisions have been made to the data collection instruments. As of June 2000, CHS has been administered statewide in five states, and in eight states, either the state or the local participating institutions have paid for the service. The resulting software is being made available at no cost to every high school and one-stop center within the participating state or local service area. Student survey data have been collected and reported on compact disks for 190 institutions, over 1,200 programs, and over 20,000 students since ACT, Inc., has assumed responsibility for CHS. Combined with data from the developmental project, we now have CHS summary data on more than 60,000 students. The patterns of response information for the more recent data are very similar to those reported in this book.

Currently, a state-level CD is prepared that contains CHS summary information by program within each participating institution in the state. The CD can be used on either an IBM compatible computer with Windows or a Macintosh computer. The software for CHS allows the user to have access to the web site of each participating institution as well as the Department of Labor web site containing occupational outlook information.

Users of the CHS software are now able to gain answers to specific and important questions about career-oriented educational programs at a specific institution. They can also gain factual information about the institution from the institution's web site, and learn detailed information about job characteristics and outlook for specific occupations from the Department of Labor web site. The software has components from ACT's Project Discover, including the World of Work map that provides information about career clusters and job families.

Currently, ACT is working to make CHS available to users through its web site, www.act.org. In the near future, a user will be able to access CHS data on any program, in any institution, in any participating state. By placing CHS on its web site, ACT will be able to update or add data for any program in any existing or new participating institution throughout the year. In addition, users will be able to access CHS from any location that has a connection to the World Wide Web.

Chapter II

Making the Case for the Counseling for High Skills (CHS) Program

Almost all of today's high school graduates hoping to enter and succeed in occupations in the Information Age will need some kind of postsecondary education. Approximately 30% will become four-year college graduates while most of the remaining 70% will, we hope, pursue some other kind of postsecondary, sub-baccalaureate career-oriented education. This book is a report of a seven-year effort to devise and try out a new approach to helping this so-called "non-college bound" population.

There is nothing new about proclaiming the need for most high school graduates to secure some kind of education at the postsecondary level. Several key examples will be briefly reviewed in the next section of this chapter. What is new are efforts of the Counseling for High Skills (CHS) program to (a) help prospective postsecondary students secure and use data helpful in making reasoned decisions regarding their post-high school educational plans and (b) help participating postsecondary institutions use a customer satisfaction approach to institutional self-study and evaluation.

In order to put things in a proper perspective, this chapter begins with a brief description of a few major leadership efforts aimed at encouraging persons to consider enrolling in some kind of career-oriented postsecondary education. This is followed by several examples of other very important efforts to do so. Next, a different perspective on the problem is presented using data taken primarily from reports published in the *Occupational Outlook Quarterly* (OOQ). Each of these pertains to predicted job openings requiring various kinds of postsecondary education. Finally, CHS data are presented as a useful way of balancing decisions based on supply with those based on demand.

Major Leadership Efforts Supporting Postsecondary Sub-Baccalaureate Education

Dale Parnell

One of the long-time national leaders in supporting some form of postsecondary education for non-four-year-college-bound students is Dr. Dale Parnell. Interest in these persons has been a major part of his career for many years. When his book *The Neglected Majority* was published in 1985, it had an immediate and major national impact on postsecondary education, and especially on the community college movement. Parnell is one of the top major national leaders in recognizing and emphasizing the need for large increases in the numbers of persons seeking postsecondary career-oriented education at the sub-baccalaureate level.

Of all the problems facing postsecondary sub-baccalaureate education, Parnell picked problems related to transition from secondary to postsecondary education as a special interest and concern. This interest led him to conceptualize and lead what he called the "Tech Prep" movement. Tech Prep, as conceived by Parnell, was aimed at helping persons make a smooth transition from secondary to postsecondary education. At the time he created Tech Prep, there were still far too many high school graduates seeking immediate entry into the occupational workforce without any of the specific job skills needed for success. Thanks to Parnell's leadership efforts in both Tech Prep and in the school-to-employment movement in general, many more persons are now seeking some form of postsecondary education prior to entering the labor market.

In addition to his leadership in relating secondary education and postsecondary education, Parnell has also served as the inventor and national leader in what he calls contextual learning. He has defined contextual learning as an effort to help learners to relate what they are trying to learn to what they may want to do with it after it is learned.

Samuel Halperin

Samuel Halperin has made numerous and impressive contributions to the national movement supporting the need for more persons to enroll in some form of postsecondary career-oriented sub-baccalaureate education. Of all his outstanding contributions, his emphasis on the importance of meeting the educational and career-development needs of minorities and economically disadvantaged persons is deserving of special recognition. Without his own national leadership efforts, it seems unlikely the needs of these persons would have been met to any significant degree.

Dr. Halperin's national/international leadership is especially seen in two historic documents. One of these, entitled *The Forgotten Half*, was published in 1988; the second, *The Forgotten Half Revisited*, was published in 1998. In both of these key publications, Halperin emphasizes the need for community-wide, not just education system, efforts to meet the career-development needs

of minority and poor persons. His emphasis on the need for many persons to acquire specific job skills at the postsecondary level is clear. So, too, is his emphasis on the importance of providing such persons with the basic academic skills required for success in postsecondary educational institutions. He has led the way toward bringing equity of career-development opportunities to all persons.

National Center on Education and the Economy

In 1990 the National Center on Education and the Economy's Commission on the Skills of the American Workforce published a document entitled *America's Choice: High Skills or Low Wages* (National Center, 1990). Its 34 members were national leaders in a variety of fields with expertise and concerns related to the need for American education to increase the ability of the United States to compete successfully in the international marketplace of the emerging information society. Commission members identified two basic directions the United States could go to compete in the international marketplace. One would be to produce workers with the kinds of high skills needed by employers in the emerging information society. The other would be to produce workers willing to work at lower wages than those paid workers in other leading nations. Commission members clearly expressed their preference for high skills over low wages.

The commission's many recommendations begin with a clear, strong emphasis on the need for workplace standards—including basic academic standards—to be required of all workers, with related standards being added for workers at various kinds and levels of postsecondary education. It is their clear emphasis on the need for workplace standards for all workers that most clearly distinguishes this approach to recommending some form of postsecondary sub-baccalaureate career-oriented education from all others currently being proposed. While "standards" are included in several other proposed solutions, they are the dominant recommendation in this commission report.

A second major contribution of this report is its emphasis on involving the business community and its relationships to the education system. By reporting how such relationships are firmly in place and functioning well in some other nations, this report provides those responsible for improving U.S. education/work relationships with a wide variety of impressive results from other nations that hold serious implications for recommending changes in the United States. It is made very clear that, if positive relationships between education and work in the United States are to compete successfully with those now in place in some other nations, sizable increases in the effort put forth by persons and organizations in the occupational society must take place. The document *America's Choice: High Skills or Low Wages* points out one key way in which this can happen.

Several other major publications directly related to the commission's

recommendations have appeared during the decade of the 1990s. Those holding special significance for meeting the need to provide postsecondary sub-baccalaureate career-oriented education include:

- Carnevale, A. (1991). *America and the New Economy*. Alexandria, VA: American Society for Training and Development.
- Committee for Economic Development (1998). *The Employer's Role in Linking School and Work*. New York: Author.
- Drucker, P. E. (Nov. 1994). The age of social transformation. *Atlantic Monthly*, 274, 53–80.
- National Association of Manufacturers (1998). *The Skills Gap*. Washington, D.C.: The Center for Workforce Success.
- Secretary's Commission on Achieving Necessary Skills (1991). *What Work Requires of Schools: A SCANS Report for America 2000*. Washington, D.C.: U.S. Department of Labor.
- Toffler, A. & Toffler, H. (1995). *Creating a New Civilization*. Atlanta, GA: Turner Publishing Inc.

Documents such as those listed here provide an abundance of evidence supporting the need for greatly increasing various forms of postsecondary sub-baccalaureate career-oriented programs and institutions. They do not, however, provide hard data regarding the best ways of convincing potential postsecondary students to enroll in such programs and institutions. Neither do they supply adequate data concerning how to measure program and institutional quality as measured by customer satisfaction.

The CHS Program was undertaken as an initial attempt to begin supplying these kinds of data. References specifically related to the major goals of the CHS program include:

- Feller, R. & Walz, G. (1996). *Career Transitions in Turbulent Times: Exploring Work, Learning, and Careers*. Greensboro, NC: ERIC Counseling and Student Services Clearinghouse.
- Gray, K. & Herr, E. L. (1995). *Other Ways to Win: Creating Alternatives For High School Graduates*. Thousand Oaks, CA: Corwin Press Inc.
- Herr, E. L. (1995). *Counseling Employment Bound Youth*. Greensboro, NC: ERIC Counseling and Student Services Clearinghouse.

A Where-the-Jobs-Are Approach to Defining the Need for CHS

Data found in this section come primarily from three sources:

1. Office of Educational Research and Improvement, U.S. Department of Education;
2. U.S. Bureau of Labor Statistics, U.S. Department of Labor; and
3. U.S. Bureau of the Census, U.S. Department of Commerce.

Data from the U.S. Bureau of the Census are typically reported both for (a) part-time and full-time jobs and (b) for workers under age 25 and workers age 25 and older. Data from the Bureau of Labor Statistics are typically reported only for full-time workers who are age 25 or older. These data are sometimes reported in terms of the number and percentage of jobs while, at other times, data are reported in terms of the number and percentage of persons. Furthermore, when reported in terms of jobs, data are sometimes reported in terms of new jobs projected to be created in a given time span while, at other times, data are reported in terms of all jobs—both new jobs and replacement jobs. Data for college enrollments typically include both two-year colleges and four-year colleges. It will be important to keep all of these kinds of understandings in mind when interpreting the facts and figures found in this chapter.

College Enrollment of Recent High School Graduates

Of the 2.8 million youth who graduated from high school in 1997, 1.9 million (67.0%) were attending college in October of that year (Bureau of Labor Statistics, 1998). This included 630,000 (22.8%) two-year college students and 1,225,000 (44.2%) four-year college students. The total of 67.0% can be compared with the 77% of high school seniors who, in a national survey, indicated they plan to enter college and earn a bachelor's degree or more (Olson, 1996). It appears most of these high school seniors followed through on their plans to enroll in a four-year college program leading to a bachelor's degree.

If these figures are compared with the 36% of new jobs requiring a bachelor's degree predicted for the 1992–2005 period (Shelley, 1994), the differences are obviously sizable. If compared to the 23.2% of *all* job openings during the 1994–2005 period expected to require a bachelor's degree or more, the differences are even larger (OC Chart, 1995–1996).

This has been recognized at least twice in the recent literature. One article by Kristina Shelley (1996) predicts a surplus of 300,000 four-year college graduates per year for the 1994–2005 period. The other article by Mittelhauser (1998) projects a surplus of 250,000 college graduates per year for the 1996–2006 period. These numbers are relatively low, due in part, to the fact that only about 50% of persons entering college with the goal of attaining a bachelor's degree finish that degree within a 10-year period (National Center for Education Statistics, 1995). Were this not so, it seems likely the surplus of college graduates would be much greater.

If all of those entering college immediately after high school graduation eventually received a bachelor's degree, it is obvious there would be a very large surplus of two-year and four-year college graduates when compared with the expected job vacancies requiring such degrees. Were four-year colleges to either (a) screen prospective students more carefully and raise admission requirements substantially or (b) lower their academic standards so as to greatly reduce the number of students who find it necessary to withdraw from college, the percentage of entering college freshmen who eventually secure a bachelor's degree would, of course, be significantly increased. If the first of these alternatives were to be adopted, it is likely that the discrepancy between the number of college graduates seeking employment and the number of college-level jobs available would be reduced. If the second were adopted, this discrepancy would grow.

Whether four-year colleges decide to raise or to lower their admission standards is clearly both a research and a philosophical issue. The ability to alter admission standards in ways that will attract or discourage x number of prospective students is well documented. In spite of this, whether a given institution decides to raise or lower its admission standards is sometimes based more on philosophical than on research grounds. Some will contend that, while the right to succeed in higher education must be earned by the individual student, the right to try should be made available to any graduate from an accredited high school who seeks admission to a publicly supported institution of higher education. Others would argue that publicly supported four-year colleges should operate in the most cost effective manner possible—which means formulating and using high admission standards.

Is there really a *surplus* of four-year college graduates? If one considers only their ability to find jobs that require a college education, the answer must be "yes." If, on the other hand, one considers the multiple goals of higher education and the wide diversity of reasons why persons enroll in colleges, the answer must surely be "no." The goal of preparation for living is much broader and more complex than the goal of preparation for making a living. There are many good and legitimate reasons for seeking a four-year college degree. Economic reasons are only one of these.

The Economic Benefits of a Four-Year College Degree

The phrase "education pays" is one with which most persons would agree. A great deal of literature has been published showing a straight-line relationship between job earnings and level of education (BLS, 1994). Shelley (1994) reported that, in 1992, the median earnings for college graduates were \$37,000 per year compared with \$21,000 for high school graduates. A recent set of data from the Bureau of the Census (Occupational Outlook Quarterly, Spring 1995) reported estimated median earnings over the work life (age 25 to 64) as follows:

Not a high school graduate	\$609,000
High school graduate	\$821,000

Some college, no degree	\$993,000
Associate's degree	\$1,062,000
Bachelor's degree	\$1,421,000
Master's degree	\$1,619,000
Doctoral degree	\$2,142,000
Professional degree	\$3,013,000

These data are impressive and obviously helpful in convincing prospective four-year-college-bound students of the projected economic benefits of higher education. Those using such data should keep in mind that each of the projected earnings represents the average work life earnings of persons in various educational categories. The range of job earnings in any category is sure to go beyond any single category median. For example, it is likely there will be some persons who are not high school graduates whose work life earnings will exceed the average work life earnings of persons with a bachelor's degree. Thus, while these figures are useful as guidelines and as the best predictions the U.S. Department of Labor can make, they do not represent the absolute truth.

Other data have been published highlighting the economic advantages of postsecondary career-oriented education at the sub-baccalaureate level. For example, Moskowitz (1995) collected job earnings data for persons seeking full-time employment immediately after leaving high school compared with those who had secured some kind of postsecondary job training before entering the labor market. She reported that those with postsecondary job training averaged earnings of \$491 per week compared with average earnings of \$322 per week for those with no postsecondary training.

Moskowitz's findings are reinforced by data reported by Cosca (1994-95). Cosca's data indicates that over nine million—1 in every 6 full-time salaried workers age 25 and older who didn't have a bachelors degree—earned more than \$700 per week in 1993. This is close to the \$716-per-week average salary of workers with at least a bachelor's degree in 1993. She also reported that, in a few occupations, more than 10% of workers without college degrees earn over \$1,000 per week. Examples of workers with less than a bachelor's degree whose median weekly salary in 1993 was \$700 or more included: computer system analyst, accountants/auditors, registered nurse, carpenters, and electricians.

In Table 2.1 both the Moskowitz and the Cosca data are placed in better perspective by other data reported by Hecker (1998) comparing weekly earnings of full-time workers.

Level of Education	Men	Women
High school graduate	\$504	\$361
Some college, no degree	\$571	\$411
Associate degree	\$612	\$473
Bachelor's degree	\$767	\$592

Source: Bureau of Labor Statistics. (Summer 1998) Occupations and Earnings of Workers, 1996. *Occupational Outlook Quarterly*, 42(2), 35.

These data make clear the importance of comparing job earnings for more than only high school graduates versus college graduates. The importance of also reporting comparisons for other kinds of postsecondary education is obvious here.

Relationships Between Projected Job Openings and Education/Training Required

Reproduced below is a very important set of data reported in the Winter 1997-98 issue of *Occupational Outlook Quarterly*. This chart contains data relating various levels of education to projected job openings for the 1996-2006 period. In reporting job openings, those due to growth and to net replacement were combined. Several very important kinds of data found in this chart are discussed here.

	Projected Percentage of Change, 1996-2006	Projected Job Openings Due to Growth and Net Replacement Needs, 1996-2006,
Short-term on-the-job training	13	21,944
Moderate-term on-the-job training	9	5,628
Work experience plus bachelor's or higher degree	18	3,481
Long-term on-the-job training	8	3,466
Work experience in a related occupation	12	3,285
Postsecondary vocational training	7	2,329
Bachelor's degree	25	7,343
Associate's degree	22	1,614
First professional degree	18	582
Doctoral degree	19	460
Master's degree	15	430
Average all occupations	14	

Source: BLS (Winter 1997-1998). Projected change in employment, 1996-2006. *Occupational Outlook Quarterly*, 41(4), 11-12.

An earlier issue of the *Occupational Outlook Quarterly* (OE Chart Winter 1995–96) contained data showing that all of the educational categories projected to have more than the average percentage of growth during the 1996–2006 period require some kind of postsecondary education. The Winter 1997–98 issue confirmed this and presented data showing that, of the six educational categories included here, two (“bachelor’s degree” and “associate’s degree”) are projected to grow by more than 20%, one (“doctoral degree”) by 19%, two (“work experience plus bachelor’s degree” and “first professional degree”) by 18% and one (“master’s degree”) by 15%. No other category growth rates come close.

In order to correctly interpret the data found in this OCChart, it will be necessary to study information found in an article by Patrick Wash (1995–96). In this article Wash defines the 11 kinds of education on the OCChart:

1. *First professional degree* (e.g., M.D., J.D.)
2. *Doctoral degree*
3. *Master’s degree*
4. *Work experience plus a bachelor’s or higher degree*
5. *Bachelor’s degree*
6. *Associate’s degree*
7. *Postsecondary vocational training*
8. *Work experience*: occupations requiring skills learned in some other occupation
9. *Long-term on-the-job training*: occupations requiring more than 12 months of on-the-job training or combined work experience and formal classroom instruction.
10. *Moderate length on-the-job training*: occupations requiring 1 to 12 months of combined on-the-job experience and informal training
11. *Short-term on-the-job training*: occupations requiring a few days or weeks of working with experienced workers and asking questions

Wash considered the appropriate category in which to place a given occupation to be that in which the largest number of persons are employed. By using this system, several occupations that many persons may think should be placed under either “Associate’s degree” or “Postsecondary vocational training” categories are instead placed in either the “Long-term on-the-job training” or the “Moderate on-the-job training” categories. Examples using the Wash system include:

Long-Term On-the-Job Training

Moderate on-the-Job Training

Carpenters

Machinists

Flight attendants

Dental laboratory technicians

Radio and TV announcers

Bookkeeping clerk

Computer operators

Medical assistants

Typists and word processors

Bus drivers (except school)

The Bureau of Labor Statistics (1997–98) has predicted that a total of 50,562,000 job openings due to a combination of growth and net replacement will occur during the 1996–2006 period. The following breakdown is projected:

1. 7,343,000 jobs (14.5% of all job openings) will require a bachelor's degree.
2. 16,239,000 jobs (including the 7,343,000 requiring a bachelor's degree) will require some kind of postsecondary institutional training; this is 32% of all job openings.
3. 34,323,000 jobs (including the 21,944,000 that require only short-term on-the-job training) will require either work experience or on-the-job training. This is 67.9% of all job openings.
4. 21,944,000 jobs will require only "a few days or weeks working with experienced workers and asking questions." This is 43.4% of all job openings.
5. The 21,944,000 jobs requiring only short-term on-the-job training are close to 6 million more jobs than the total number requiring any kind of postsecondary education (16,239,000).

It is also important to note that 10,424,000 projected job openings will require either long-term or moderate on-the-job training. This projection needs to be compared to the 16,239,000 projected job openings predicted to require any kind of postsecondary training (ranging from postsecondary vocational training to a bachelor's degree). Employers who operate either moderate or long-term on-the-job training programs appear to be helping about two-thirds as many workers meet their needs for some kind of postsecondary education as are postsecondary career-oriented educational institutions.

There is an obvious need for many career development specialists to greatly increase their knowledge regarding postsecondary career-oriented educational opportunities operated by employers as on-the-job training efforts. The fact that most recent high school graduates will be considered ineligible to participate in these on-the-job training programs does not lessen the importance of the topic.

Because the Wash system recognizes only one category for each occupation—the one with the largest number of persons—it ignores other categories with sizable numbers of workers in various occupations. From a career development perspective, it would be more helpful if, in the case where sizable numbers of persons in a given occupation are found in two categories, both categories were listed. This is important for occupations where sizable numbers of persons secure their training either through on-the-job training or through career-oriented educational institutions.

Disturbing Aspects of Selected Department of Labor Data

Although it is encouraging to find that the fastest growing occupations are those requiring some kind of postsecondary education, it is at the same time disturbing to note that, when all of these are added together, they represent only about one in three of all new and replacement jobs (32%) expected to open during the 1996–2006 period (Bureau of Labor Statistics, 1997–98).

It is also disturbing to find that approximately two in five (43.4%) of new and replacement jobs will require only a few days or weeks of working with experienced workers whereas only one in three (32%) will require some form of postsecondary education.

It is most disturbing to find that the largest expected categories of new and replacement jobs—21,944,000 in all—are those that appear least likely to offer workers good career development opportunities. It appears that many job openings during the 1996–2006 period are likely to be in what has come to be called the secondary labor market. These are jobs characterized by low pay, few worker benefits (such as health provisions, vacations, or retirement packages), no job security, and little opportunity for advancement to a higher level. Most professional career counselors do their best to help their clients avoid these jobs. In doing so, counselors are almost sure to point toward postsecondary career-oriented education and/or employer-sponsored on-the-job training programs as the best ways to prepare for success in jobs found in the primary labor market. With the figures presented here, it seems unlikely this success will, for many persons, be easy to accomplish.

The Need for High-Quality Postsecondary Education Programs

As relationships between education and employment become closer, it seems inevitable that education will continue to grow in importance as a vehicle for obtaining better jobs. This will be especially evident to those studying the occupational history of persons who enroll in some formal institutional program or some moderate or long-range on-the-job training program aimed at preparing them for employment. Such programs, it is hoped, reduce the amount of time many of these individuals are forced to spend in the secondary labor market, where most of the projected 21,944,000 job openings during the 1996–2006 period requiring only short-term-on-the-job training are located. Helping persons move from such jobs to those that pay more money, have more interest for the individual worker, provide generous fringe benefits, and participate in good retirement programs should be fully as important to career development specialists as is the current emphasis on helping persons access the 7,343,000 jobs that are projected to require a bachelor's degree.

We found that many students from whom we were able to collect data in the Counseling for High Skills project were 25 years of age or older. Most of them appeared to have entered the secondary labor market directly on leaving high

school. It appears to have taken them almost 10 years to discover a high school education isn't enough to find good jobs in today's primary labor market. If they want such jobs, they will need some specific career skills taught at the postsecondary sub-baccalaureate level. Some of these persons, of course, will be able to obtain useful vocational skills through participating in employer-based on-the-job training. Many others, however, find it necessary to seek some kind of postsecondary career-oriented education in order to obtain such skills.

The kinds of career-oriented postsecondary education programs available at the sub-baccalaureate level vary from those requiring only a few weeks to those requiring at least two full years. Most of the kinds of high skills/high tech jobs predicted for the emerging Information Age will require at least two years of postsecondary education. Many of today's postsecondary career-oriented educational institutions appear to be concentrating on teaching career skills at a level lower than envisioned for most jobs classified as high skills/high tech. The need for adding a variety of truly high skills/high tech educational offerings to the more traditional one-to two-year vocational programs continues to grow. The United States cannot expect to compete well in the international marketplace until and unless our postsecondary institutions prepare significant numbers of persons with truly high skills/high tech career skills. This must be done without detracting from the need for and value of other kinds of high skills programs that call for more than a high school education but less than what we would call high skills/high tech skills.

It would be a huge mistake if America's current postsecondary sub-baccalaureate career-oriented educational institutions were suddenly to cease providing the high skills programs now in existence and, instead, switch to offering only high skills/high tech programs. There are a multitude of reasons why this is so:

1. Most of today's institutions do not now have nor could they afford the cost of switching their offerings from a high skills to a high skills/high tech mode.
2. The teaching faculty in most high skills institutions have not been prepared with the expertise required to function at the high skills/high tech level.
3. It appears that, as of now, there would not be enough truly high skills/high tech jobs available for all of the graduates of such high skills/high tech types of educational programs.
4. The high job placement rates of today's high skills programs (see chapter VII) stand as clear evidence that such programs are needed and should be continued.

It seems to us that a sensible solution can be found and applied. Such a solution would involve the following elements:

1. Current one-to two- year high skills programs now being taught at community colleges, publicly supported career-oriented institutions,

and private career colleges should be continued at multiple sites in each state within commuting distances from students.

2. In each state, at least one postsecondary institution teaching only high skills/high tech programs should be created and operated. That institution should be equipped with the very latest high skills/high tech equipment and a teaching faculty well equipped to help students learn how to use that equipment. It should be open to students from all parts of the state and contain housing provisions needed by its students. Working collaboratively with high skills/high tech business organizations in the state, it should combine academic learning in the classroom with some kind of on-the-job training conducted in such organizations.
3. The statewide high skills/high tech institutions should use high admission standards to evaluate applications received from (a) graduates of postsecondary "high skills" programs, (b) persons who have enrolled in but have not graduated from four-year colleges and universities, (c) recent high school graduates, and (d) adult returning students. The standards should be set at a level no lower than those used for admission to the state's publicly supported colleges/universities.

In the long run, whether the variety of career-oriented postsecondary programs operating at the sub-baccalaureate level will meet the career preparation needs of prospective workers will be dependent on the nature, the quantity, and the quality of such efforts. This, in turn, appears to depend greatly on the nature and operation of partnership programs between educational institutions and employers. Given the right kinds of collaborative efforts, it seems likely current postsecondary career-oriented institutions could equip their students with specific job skills needed by employers. To the extent this occurs, the current great need for employers to establish and operate both moderate and long-term on-the-job training programs by themselves should be somewhat reduced and the number of truly collaborative business/education joint efforts should be increased.

The goals of students in postsecondary career-oriented sub-baccalaureate-level institutions must include one aimed at reducing the amount of time required for recent high school graduates to ready themselves for and establish themselves in jobs in the primary—not just the secondary—labor market. If this goal is to be met, high-quality educational programs must be readily available to them. If this goal is not well met, the only logical alternative will be to expand greatly various kinds of on-the-job training programs. The danger of moving in this direction is that it can create conditions where employers—not prospective students—are making the primary decisions regarding the kinds of educational programs available to students. Major challenges exist to make on-the-job training programs offer as much freedom of career choice as possible to their applicants.

It is important to recognize that ideally institutional education programs and on-the-job training programs will supplement, not compete with, each other. There are some occupations where because of, for example, the need for specialized equipment, on-the-job training will be the only efficient way in which persons can be prepared to become successful employees in that occupation. There are some others where either an on-the-job training or an educational-institution approach would be equally desirable. It is important that persons in the process of making career decisions be aware of both of these approaches to specific career skills development.

How CHS Helps Prospective Students Consider Options for Sub-Baccalaureate Career-Oriented Postsecondary Education.

Far too many persons think about the postsecondary educational options available to them only in terms of four-year colleges and universities. If they recognize and think about other kinds of postsecondary institutions, they do so under an assumption they are "second best" when compared with four-year colleges.

In making judgments regarding various kinds of career-oriented postsecondary institutions, prospective students are inclined to listen most closely to their peers who are or have been attending such institutions. To meet this need, CHS collects data from present and former students and shares those data with persons considering attendance at various institutions.

It is important that *valid* data be transmitted to prospective students. To meet this need, CHS items are constructed primarily by asking questions that current students—not the institution itself—are the proper experts to answer. Further, the standardized data collection procedures used emphasize to respondents that their answers are intended to benefit prospective students, not the educational institution.

Ample opportunities must be provided for prospective students to compare responses from current and former students in each program in each institution. To meet this need, data collected from students in each program in each institution are arranged on a computer disk so they can be compared item by item, program by program, and institution by institution.

Finally, it is important that data be kept up to date. To meet this need, data are recollected every other year and distributed statewide to participants.

The Use of CHS Data in Institutional Self-Study and Evaluation

If the United States is to use education/work relationships as a tool for competing in the international marketplace, it will be essential that participating educational institutions produce the kinds of high-quality graduates needed by employers. If this is to happen, it should be made mandatory to conduct on-going institutional evaluation efforts on a regular basis.

One approach to assessing institutional worth is to ask current and former students to relate their experiences in their educational program and to judge those experiences. If most current students in a particular postsecondary institution report that they are highly satisfied with the educational program in which they are enrolled, it is highly reasonable that future students will be inclined to attend that institution.

The prime advantage CHS has over many other traditional approaches to institutional self-study and evaluation is its use of student data. Since current and former students completing CHS instruments are assured their answers are intended to help prospective students make decisions, chances of getting honest responses are increased over what would be expected if students were told their answers were for some other kinds of institutional purpose.

Summary

There seems to be little doubt that education/work relationships continue to become closer at all levels of education and all major segments of the occupational society. The need to consider such relationships at the postsecondary sub-baccalaureate level of education is especially obvious. Good jobs are more often available to those with some form of postsecondary education than to those lacking such education.

The reality of U.S. occupational society today in terms of job availability make it apparent that postsecondary educational programs are not needed by all workers. This in no way means that this condition should be accepted as satisfactory. It is at the postsecondary level where the fastest rate of growth (but not the greatest number of jobs) is located.

The CHS Program is needed to (a) to help persons plan for and make decisions concerning their possible attendance in some form of postsecondary education and (b) for use in institutional self-study and evaluation.

Chapter III

What Kinds of Persons Enroll in Postsecondary Sub-Baccalaureate Career-Oriented Programs?

Among the first questions asked by many persons considering attendance at a postsecondary sub-baccalaureate career-oriented institution are “Who would I find as classmates?” and “What’s the competition?” Information and data found in this chapter should be a helpful beginning but not a final nationwide answer to this question.

Data presented here were collected during the 1992–1998 period in the CHS project described in chapter I. It is important to keep in mind that these data were collected from a total of 39,940 students enrolled in 2,200 programs conducted in 382 postsecondary institutions in 14 states. Participating states included Maine, Pennsylvania, North Carolina, Florida, Arizona, Texas, Washington, Colorado, Nebraska, Iowa, Missouri, Kansas, Wisconsin, and the District of Columbia.

There is no way these students can be considered to be a random sample of all students enrolled in some form of postsecondary sub-baccalaureate career-oriented institution nationwide. On the contrary, they must be regarded as only a selected sample from those postsecondary institutions in each of these 14 states who agreed to allow data to be collected from their students. So far as is known, no other sets of data have been produced covering the variables found in this document and reported in such a way that direct comparisons with other data become possible.

In spite of its sample bias, the data reported here can be considered valuable, if for no other reason than because they were collected from thousands of students in each of a number of categories. With the sole exception of Private Career Colleges, where data were collected from only 6,492 students, all other categories reported data from more than 10,000 students. This included 22,541 public community students, 10,428 public postsecondary career school students, 25,111

students under age 25, and 13,412 students age 25 and older. With samples this large, it seems safe to make some broad comparisons.

The exact numbers involved in each comparison can be found in Appendix A. Here, an attempt will be made to concentrate on a series of generalizations that appears to grow out of the data in these tables. Those who regard one or more of these generalizations as either inappropriate or inaccurate—or both—are urged to state the database on which their objections are founded.

Generalizations

Important gender differences calling for recommended priorities are clearly seen in these data.

Data found in Table 3.1 show a variety of interesting comparisons including the following:

1. Persons enrolled in some form of career-oriented postsecondary institutions are slightly more likely to be female than male.
2. The percentage of public community college students who are female (55%) is significantly higher than the percentage who are male (45%).
3. The largest male/female differences in these data are seen in the percentage reporting themselves to be age 25 or older with females (58%) clearly leading males (42%).
4. The percentage of male students is clearly higher than the percentage of female students both in career postsecondary schools and in private career colleges.

Why should a higher percentage of public community college students be female rather than male? There are a variety of possible reasons, each of which has action implications. For example, part of the reason may lie in the fact that several of the most popular two-year programs offered in community colleges—including those in business and in health occupations—typically enroll more female than male students. Another factor may be that some of the trade/technical types of programs typically appeal much more to males than to females, thus leaving fewer males to choose to attend a community college.

Perhaps an even more probable reason can be found by noting that much higher percentages of students age 25 or older are female rather than male. Just the opposite, of course, is true for students attending either a career-oriented postsecondary school or a private career college where significantly greater percentages of students are male rather than female. It may be that males are more likely to receive assistance in career development at earlier ages than females. The differences are too great to be ignored.

If reduction in sex stereotyping is the goal, the ideal situation would be one where the percentage of male versus female students is close to a 49/51% split in this total sample of 39,940 students. The fact that percentages quite different from these were found for all three types of educational institutions and for both age groups makes it clear that there is much yet to be done if problems related to reduction of sex role stereotyping are to be solved.

The percentage of persons from minority backgrounds enrolling in these three forms of postsecondary education is compatible with data for the population as a whole.

In the total sample of 39,940 students, about 3 in 4 students in each of the three types of educational institutions reported themselves to be White Caucasians and only about 1 in 10 reported themselves to be Black/African Americans. This is very consistent with data reported in the Winter 1999–2000 edition of *Occupational Outlook Quarterly* showing that, in 1998, 74% of the labor force was White Non-Hispanic persons and 11% was Black Non-Hispanic. (Bureau of Labor Statistics, 1999–2000).

These figures are important, in part, because of the current movement encouraging minority persons to enroll in four-year colleges and universities. Very few persons would argue against this movement. At the same time, it seems clear that another movement now needed is one that argues for helping all high school graduates enroll in some kind of postsecondary education. Helping all youth—including minority youth—become acquainted with the range of postsecondary educational choices available to them and how to move from one to another must become a national priority of K–12 education systems.

A large percentage of career-oriented students consider themselves to be enrolled as full-time students.

More than 3 in 4 students in each of the six categories reported themselves to be enrolled on a full-time as opposed to a part-time basis (see Table 3.5). Exactly what is meant by the term *full-time* is not clear. With the very large numbers of students reporting themselves to be employed on a full-time or part-time base while enrolled, it is obvious most students don't spend the majority of their time operating only as a student. For CHS kinds of institutions it seems more accurate to describe a full-time student as one who enrolls for courses at the time and in the sequence required for graduation to occur in a specified time frame. It seems this definition—or something close to it—is what students were considering when they reported themselves to be full-time or part-time.

Over half of students both in career postsecondary schools and public community colleges but only about 2 in 5 private career college students come from high schools less than 25 miles from the institution.

Only in private career colleges do as many as 1 in 4 students come from a high school 200 or more miles from the institution (see Table 3.6). The general tendency is clearly one of selecting a postsecondary institution close to the high school the student had attended.

One of the principal advantages of enrolling in an institution close to where one lives is that it will probably be less expensive than would be the case were the student to move to a different community and be faced with both moving and housing expenses. Further, if the institution is supported in part with local tax dollars, it is usually considerably cheaper for students to attend their local

educational institution. It is easy to see why attending an institution close to home has great appeal to many students.

The price to be paid is that the variety of career choices available to the student is limited to those for which the local postsecondary career-oriented institutions offer courses. No matter what the person's career decisions are, the opportunities for educational choices are limited to those existing in the local community.

The primary way maximum opportunities for career choice can be made available for prospective students statewide is for states to create and operate at least one exemplary postsecondary career-oriented institution offering a wide range of very high-quality programs. Such an institution would be analogous to the publicly supported state university in each state, in that it would offer housing arrangements, recreational facilities, and career placement for students along with the highest-quality instructional programs found anywhere in the state. It would also offer support and help to other publicly supported educational institutions in the state. This type of institution is not currently popular. It should become so.

While the high school diploma remains the most popular highest level of education completed by these three types of students, more and more of them are also enrolling in other forms and kinds of postsecondary education.

It is especially exciting to see that more than 1 in 5 students in career postsecondary schools, private career colleges, and public community colleges reported they had "some college but no degree" (see Table 3.8). It seems likely that these are among the 50% of entering college freshmen in four-year colleges who never attain a bachelor's degree. If this is correct, there should be many more students like this. Unfortunately, too often in the past, we have found dropouts from four-year colleges reverting back to dead-end, low paying, secondary labor market jobs without considering other kinds of educational opportunities. It seems obvious they would do much better considering the many kinds of education offered in the three types of institutions included in the CHS program.

Almost 1 in 6 students age 25 or older reported they already had either an associates or a bachelor's degree prior to enrolling in their current career-oriented institution. This is one indication of a possible trend that finds four-year college graduates with liberal arts degrees enrolling later in a career-oriented institution that specifically prepares its students for employment. This is not to say, of course, that persons with four-year liberal arts degrees are expected to have difficulty finding employment. We know that many of them have little difficulty finding good jobs. What we are saying is that career-oriented educational institutions operating at the sub-baccalaureate level remain an option for both four-year college graduates and four-year college dropouts as well as for many other persons.

A majority of students would meet the admissions requirements of many four-year colleges had they chosen to take that route.

Two in three community college students reported themselves to be in the upper half of their high school graduating class (see Table 3.9). Only about 1 in 4 students from any of the three institutional categories reported themselves to be in the lower half of their high school graduating class and fewer than 1 in 20 failed to either graduate from high school or pass the GED. It certainly would be neither fair or accurate to categorize these students as persons generally unable to become four-year college graduates.

Large and important differences exist between the programs of study students followed in high school and the high school program of study they would recommend to others.

Approximately 2 in 5 of these students in all three kinds of institutions reported having taken the General program in high school (see Table 3.10). Yet, only slightly over 1 in 10 in each type of institution would recommend the General program to others.

It was somewhat surprising to discover that approximately 1 in 5 students in both career postsecondary schools and in private career colleges recommend that persons considering enrolling in their institution take the College Prep program in high school (see Table 3.11). Equally surprising, 2 in 5 public community college students recommended the College Prep program to those high school students considering enrollment in a community college. Still more surprising was a finding that although only about 1 in 10 community college students took the Vo-Tech program when they were in high school, 1 in 5 recommended the Vo-Tech program to those still in high school. It seems clear that career-oriented students believe that prospective students should have a level of high school academic preparation that is very similar to that of four-year college-bound students

High school courses recommended by students in career-oriented post-secondary institutions, when viewed as a total package, come close to constituting the kind of high academic standards currently being recommended by many in the educational reform movement.

Over half of all students in all three types of institutions recommended that today's high school students considering enrollment in any kind of postsecondary career-oriented institution, take the following courses while in high school (see Table 3.12):

1. Mathematics (general/vocational): 92%
2. English/Language Arts: 90%
3. Mathematics (algebra and above): 80%
4. Keyboarding/ Word Processing: 79%
5. Science (physical and biological): 66%
6. Computer Programming: 55%

7. Business Education: 53%
8. Career Education/Exploration: 51%

It is highly unlikely any of today's educational reform leaders would recommend that these courses constitute the total curriculum for tomorrow's high school students. (For example, no mention is made of the great importance of Art, Music, Social Studies or Health.) In spite of this, the obvious emphasis on a number of academic areas where standards are considered to be very important suggests that these students are supporting efforts aimed at increasing academic standards and accountability.

On most CHS Student Survey items, students under age 25 and students age 25 and older give highly similar responses. On a few items important differences exist.

Of the 137 items in the CHS Student Survey, sizable differences in responses given by students under age 25 vs students age 25 and/or older were found for only 19 items (see Tables 3.13 and 3.14). A few of the most surprising findings include:

1. A clear majority (53%) of students under age 25 are male whereas, for students age 25 and older, only 42% are male.
2. A majority of students under age 25 reported high school as their highest level of education whereas for students age 25 and older, almost 3 in 10 reported some college.
3. Most students under age 25 reported studying 1 to 3 hours per week whereas a majority of those age 25 and older reported studying 4 to 10 hours per week.
4. A majority of students under age 25 are single whereas a majority of those age 25 and older are married.
5. Most students under age 25 judge themselves to be safe on campus whereas a majority of those age 25 and older judge they are very safe.

Of the findings where differences were judged to be most serious, the following stand out as especially significant:

1. The modal number of hours per week now employed was 10 to 20 hours for students under age 25, but 31 to 40 hours per week for students age 25 and older;
2. Most students under age 25 had not been a full-time employee whereas, for students age 25 and older, the modal number of jobs held prior to enrolling was four.
3. The modal salary expected upon graduating was, for those under age 25, \$200 to \$300 per week whereas, for those age 25 and older, it was \$300 to \$400 per week.

For the most part, however, only small differences in responses for those under age 25 and those age 25 and older were noted. It is especially significant that no large differences are found on items centered around how students

judge the institution and its instructors. On matters of evaluation, responses are generally highly similar.

Concluding Remarks

In this chapter we have, because of concerns relative to both clarity and accuracy, often included data found in Tables 3.1 to 3.15 found in Appendix A. It is hoped this will stimulate many readers to study the entire set of tables carefully. With the large Ns involved, this should be a fruitful and rewarding exercise.

This chapter would be incomplete if we ignored some of the subjective learning that took place during data collection that does not show up anywhere in the formal statistics. This learning took place primarily in small focus groups conducted immediately after the CHS Student Survey had been administered. In each focus group, current students were asked to name the most important specific things prospective students should know as they considered enrolling at that institution. In naming these things, students also shared with us a great deal of information about themselves. Collectively, the information gathered permits us to answer in part the question "What kinds of specific behaviors do you think would be most typically expressed by students in these three kinds of postsecondary institutions?"

The following are some of the answers to this question:

These students typically are eager learners. They want to learn. They do not need any kinds of artificial motivation to convince them it is important to learn.

These students typically work very hard in their efforts to master what is being taught. They are good at pushing their instructors to help them learn as much as possible.

These students typically are self sufficient. They are not asking others for help in order to be successful. On the contrary, they typically seem to be persons who take self-responsibility very seriously.

A clear majority of these students seem to embrace and support an approach to instruction as a combination of "What is it?" "How can I do it?" and "What can I do with it after I have it?" The importance of "hands-on" education seems clear in all these institutions.

There seems to be a general trend among both students and their instructors toward emphasizing the importance of and supporting the practice of moving toward excellence. We very seldom noticed either students or instructors who seemed to be operating on an "it's good enough" approach. On the contrary, we observed time after time where both students and instructors were seen volunteering their time to help make a product or a project better.

There seems typically to be a pride in accomplishment that gives students at these institutions pride in themselves. Very few seem to be asking to get "something for nothing." On the contrary, there seems to be a clear emphasis on the importance of earning what one gets.

When the kinds of personal actions outlined here are combined with the increasingly stringent academic standards required for success in the kinds of educational institutions from which we have collected data, the result is sure to be a corps of institutional graduates who will be ready, willing, and able to take their places as members of the primary workforce. The postsecondary career-oriented sub-baccalaureate education movement is now moving in this direction. It is important that it continues to do so.

Chapter IV

How Persons Make Decisions to Enroll in Postsecondary Career-Oriented Institutions

If professional educators are successful in convincing more persons that postsecondary career-oriented institutions at the sub-baccalaureate level are worthy of consideration, they must also accept responsibility for helping them make informed and reasoned decisions with respect to their plans to attend such institutions. The purpose of this chapter is to present some thoughts and information regarding both the need for such help and current practices in supplying it.

Two major kinds of problems must be solved. The first problem is one of getting rid of the false perception that the "best" kind of postsecondary education for all persons is the four-year college. When the "What's the best college?" is asked, the initial response must be "For whom?" The fact that, on average, persons with four-year college degrees earn higher salaries than persons who graduate from one-to two-year sub-baccalaureate institutions should not be the sole factor in judging the relative value of two-year versus. four-year educational institutions. Instead, individual decisions should be made within the context of many kinds of data including economic factors, career aptitudes, career interests, personal financial situations, and personal value systems. Data presented in chapters 2 and 3 demonstrate that the four-year college is not automatically the "best" choice for all high school leavers to make.

The second problem is one of convincing high school leavers and unemployed adults that, in the emerging high skills information age, some kind of postsecondary education is increasingly necessary for persons who want to obtain good jobs in the primary labor market. The days when a high school diploma was sufficient for most persons to secure jobs that both pay a decent wage and have some long-run career benefits are past for most persons. In spite

of this, many youth leave high school seeking immediate paid employment. Typically, they have little difficulty finding a job. The problem is that the jobs open to them are primarily secondary labor market jobs requiring only low-level short-term training, having few if any fringe benefits or opportunities for advancement, and offering very little job security or career interests to workers.

The one-to two-year postsecondary educational institution is one of two major ways in which the majority of citizens can acquire specific high-tech skills needed in the emerging occupational society. The other prime vehicle for acquiring high-skills/high-tech jobs is on-the-job training available primarily to currently employed persons. On-the-job training for high-skills/high-tech jobs is typically not available to unemployed persons. This makes the one-to two-year career-oriented postsecondary institution even more important.

This chapter presents a variety of ways in which currently enrolled students first learned about and were encouraged to attend a career-oriented postsecondary institution, ways in which institutional representatives influenced enrollment decisions, how and the extent to which high school students made career-oriented decisions, and ways in which high school counselors influenced enrollment decisions.

This presentation contains a series of generalizations intended to represent what we currently know regarding how persons make decisions to enroll in career-oriented postsecondary institutions. The specific data on which the contents of this chapter are based can be found in Appendix B, Tables 4.1 to 4.11.

Generalizations

Friends are, by far, the primary source by which persons first learn about specific postsecondary career-oriented sub-baccalaureate institutions.

No matter which of the three types of institutions is considered, most current students first learn about the institution they are attending through friends. Almost 1 in 3 current students first learn about the institution they attend through friends. This is true both for students who enroll in career postsecondary schools and for those who enroll in public community colleges. Although only about 1 in 5 private career college students first learn about that institution from friends, this still is a higher percentage than from any other source.

Data are not available at this time to help us understand either (a) who these friends are or (b) how these friends gained enough information so that they could talk to prospective students regarding the institution. From focus group conversations, it appears these friends were, for the most part, currently enrolled postsecondary students. To the extent this is true, customer satisfaction data can obviously be very helpful in attracting potential students. There is a great need for much more active programs in which current students are asked to help prospective students learn that some form of postsecondary education will be needed and that this institution is one they should seriously consider attending.

In helping prospective students first learn about their institutions, private career colleges make significantly greater use than do publicly supported postsecondary institutions of both (a) TV and/or radio and (b) institutional representatives. If significant progress is to be made in convincing most high school graduates that some kind of postsecondary education will be needed for entry into most good jobs in the primary labor market, all postsecondary institutions, including private career colleges, should greatly expand their efforts to help prospective students at least become aware of this need.

Fewer than 1 in 10 currently enrolled students first learned about the institution they are attending from either a high school teacher or a high school counselor. This is a situation that can and should be corrected immediately. High school teachers and counselors should be among the first to discuss with high school students the need for them to seriously consider enrolling in some kind of postsecondary education. The days when only a high school diploma was needed in order to secure good jobs in the primary labor market have passed. All secondary school educators should make it a high priority to help their students understand this.

A majority of postsecondary career-oriented students believe they made the decision to attend their postsecondary institution by themselves rather than being strongly encouraged to attend by others.

As could be expected, this is especially true for students age 25 and older. It is least likely to be true for students under age 25 (see Table 4.2).

Approximately 1 in 4 students under age 25 are most strongly influenced by their parents to attend the postsecondary institution in which they are currently enrolled. The need to acquaint parents of secondary school youth with information regarding a variety of postsecondary education opportunities—not just 4-year colleges—is clear and obvious. Attempts to help parents gain these kinds of understandings may result in criticism from some of those parents who are absolutely committed to sending their child to a four-year college or university. To the extent that this occurs, the need for teacher/counselor action becomes even greater.

Two findings from the CHS Student Survey on this topic were especially bothersome. The first was the data showing that only 1 in 50 currently enrolled students reported they were most strongly influenced to attend their postsecondary institution by a representative from that institution. Apparently the presence of institutional representatives is not regarded by these students as very influential in their enrollment decisions. This may well be welcomed by postsecondary institutions that are interested in informing but not in selling prospective students on the institution. On the other hand, those institutions who count heavily on increasing enrollments through actions of institutional representatives in various places may be discouraged by these data.

The second discouraging finding was the data showing that fewer than 1 in 50 students reported they were most strongly influenced to enroll by a previous

employer. In view of the current emphasis on downsizing the total number of workers in those organizations moving in a high-skills/high-tech direction, we had hoped to find large numbers of currently enrolled students age 25 and older, reporting their previous employer had strongly encouraged them to secure the kinds of job skills offered by the educational institution they are now attending. That hope was not realized in these data. Of course it could be that previous employers have made these kinds of recommendations but other sources were even more powerful in student enrollment decisions. This is a subject much in need of investigation at the present time.

Private career colleges are much more helpful than either career postsecondary schools or public community colleges in helping prospective students acquire information regarding the institution prior to enrollment.

For example, whereas about 1 in 3 students in career postsecondary schools and nearly 1 in 2 in community colleges reported they never had a visit with an institutional representative prior to enrolling, only about 1 in 10 private career college students said they had no such visit (see Table 4.3). Similarly, while 2 in 5 community college students reported they never had a formal admission interview, less than 1 in 10 private career college students reported this to be true for them (see Table 4.4).

Slightly more than half of all community college students, 2 in 3 students in career postsecondary institutions, and 3 in 4 of private career colleges reported that "all" or "most" of the information they received in an admissions interview was accurate (see Table 4.3). In viewing these data, it is important to keep in mind that more than 2 in 5 community college students reported they never had an admissions interview, thus making it impossible for them to say how "accurate" it was.

Similarly, when asked to judge how well information was explained was in the admissions interview they had prior to enrolling, close to 9 in 10 private career college students but only about half of community college students reported things were either "very" or "somewhat" well explained during their admission interview (see Table 4.4).

The clear superiority of private career colleges in helping prospective students learn about the institution is also seen when current students are asked whether or not they had visited the institution prior to enrolling there. Whereas more than 8 in 10 private career college students reported this to be true for them, only about 2 in 3 students in either career postsecondary schools or public community colleges reported they had visited the institution prior to enrolling (see Table 4.5). In view of the great amount of information to be gained from visiting the institution—especially if opportunities to visit with current students during such visits are encouraged—all postsecondary institutions interested in increasing student enrollments are urged to seriously consider making at least one visit to the institution part of the admissions process. When one considers that most of these students come from communities within 25 miles of the institution, this should not be a difficult task to accomplish.

Only a minority of postsecondary career-oriented students chose the institution they attend primarily because of specific career skills taught at that institution.

It had been assumed that most of these students would have chosen the institutions they attended because the career courses offered matched students' interests. In one sense that assumption appears justifiable in that a higher percentage (31%) of students chose that response than chose any of the seven other reasons offered to them (see Table 4.6). At the same time, to find that fewer than 1 in 3 students chose that response raises doubt regarding the validity of this assumption. It is sure to lead some to question whether most of these students had made clear career choices at the time of their enrollment. These data make it appear they had not done so.

The second most popular response, chosen by 26% of all students, was that the institution was close to where the student was living. This finding reinforces the suspicion that sizable numbers of these students may not have made clear career decisions at the time of their enrollment. It seems apparent that large numbers of students make enrollment decisions based to a considerable extent on geography rather than on the content of the courses being considered. This is especially true for community college students of whom 1 in 3 reported they decided to enroll in institutions that were close to where they live.

The most important factors in deciding to enroll in a specific institution was very similar for students under age 25 compared to students age 25 and older. The reported percentages differed by less than 3% on each of the eight possible choices for students in these two categories. The need for assistance in career decision making appears to be about the same for both.

There is a clear need to increase the emphasis in K-12 education on helping high school leavers consider some kind of postsecondary education.

At present it appears that about 6 in 10 postsecondary career-oriented students made their current career choices after leaving high school (see Table 4.7). This holds true for all three types of institutions, but definitely diverges when the percentage for students under age 25 (47%) is contrasted with the percentage for students age 25 or older (87%). It appears that today's secondary school counselors are devoting much more time to helping high school students consider various kinds of postsecondary education available to them than did counselors in earlier years.

The same pattern shows up when the percentage of students under age 25 who seriously considered going to this type of institution while still in high school (51%) is contrasted with the percentage of those age 25 or older (21%) who decided to do so (see Table 4.8).

It is neither surprising nor upsetting to find that large numbers of high school leavers have not yet made definite career decisions. It is upsetting to see so many who have apparently never even considered any kind of postsecondary career-oriented education. It seems clear that career development programs are

needed by many postsecondary school students who are ready to engage in career exploration but not yet ready to make firm career decisions (see Table 4.9).

School counselors are currently playing an active and positive role in helping high school students consider some form of postsecondary education, but there is a need for them to do much more.

Fewer than 1 in 20 students reported there was no school counselor in the high school they attended (see Table 4.10). Almost all of these students reported they did have a counselor when in high school. However more than 2 in 5 reported either that they did not discuss any kind of post high school plans with a counselor or that they could not remember doing so (see Table 4-11). It is important to recognize that these students represent that portion of high school students who are not planning to attend a four-year college or university. Since school counselors spend so much time helping students headed toward four-year colleges, this may help explain why about 45% of high school students headed toward postsecondary career-oriented institutions either had no visit with their school counselor or could not remember doing so.

Of those students who reported they did visit with their high school counselor substantially more reported their counselor was encouraging (15%) than discouraging (2%) about the desirability of the student's attending a postsecondary career-oriented institution. While the percentage of counselors reported to have made positive remarks is small, it is still much higher than the percentage reported to have made discouraging remarks. The ideal situation, from a counseling point of view, is to find postsecondary students reporting that their school counselors informed them about the institution but neither encouraged nor discouraged them from attending it. About 1 in 6 students (15%) reported this was true for them.

Concluding Remarks

Based on the research data leading to the series of generalizations found in this chapter, the following conclusions appear to be warranted:

- *The prime kind of knowledge leading persons to enroll in postsecondary career-oriented institution is that provided by current students.* The need for more and better customer satisfaction data collected from both present and former postsecondary students is clear. Both positive and negative reports are needed to help prospective students make good decisions. The kinds of knowledge and skills needed to generate these data are now well known and available.
- *Parental involvement in helping high school leavers make postsecondary education choices is essential and in need of great improvement.* The bias most parents have in favor of four-year colleges over postsecondary sub-baccalaureate education must somehow be

overcome. The kinds of data reported in chapter 2 of this book need to be packaged in an attractive and understandable manner for distribution to parents as well as to prospective students. It is essential that active efforts be made to inform and educate parents as well as youth regarding a variety of kinds of postsecondary education.

- *In each state an active inexpensive campaign should be organized and conducted that encourages all high school leavers to visit a variety of kinds of postsecondary institutions.* Such visits should include opportunities to visit with current students.
- *There is a great need for school counselors to organize and conduct a variety of efforts aimed at helping high school leavers become familiar with and make decisions concerning their possible enrollment in postsecondary sub-baccalaureate career-oriented institutions.* School counselors need to become fully as effective in helping students consider these institutions as they currently are in helping them consider opportunities in four-year colleges.
- *Much more needs to be done.* Knowledge regarding both the need for and the kinds of activities needed to help persons make career decisions leading to enrollment in a wide variety of postsecondary education is being rapidly accumulated. To catch up with this new knowledge, there is a great and growing need for program activities aimed at helping persons make postsecondary decisions .

Chapter V

Student Reports: Student Life in Postsecondary Career-Oriented Institutions

What can students expect to find once they have enrolled and officially entered the postsecondary institution of their choice? How different is this institution from high schools that students have attended? How different is it from what one could expect to find at a four-year college or university?

As with all other major topics discussed in this book, each of these questions must eventually be answered for students in each program at each postsecondary institution. These kinds of highly specific data are provided for use in counseling persons considering enrollment at each postsecondary institution participating in the CHS Program.

The purpose of this chapter is to present a series of generalizations growing out of data collected from almost 40,000 postsecondary students during the 1992–1999 period. Most, but not all, of these generalizations are based on specific data found in Appendix C, Tables 5.1–5.20. Readers wishing to study the data on which these generalizations are based are urged to refer to these tables.

Generalizations

Students enrolled in career-oriented postsecondary institutions are, by and large, comfortable in and satisfied with these institutions.

A high percentage of these students feel safe on the campus of the institutions they attend (see Table 5.1). The institutions they attend are not unlike those they thought they might find. Strong feelings of dislike and dissatisfaction are very seldom seen when currently enrolled students are asked to judge the degree to which the institution is meeting their educational and career needs. There is very strong agreement voiced by a majority of students that, by and large, the institutions they are attending meet the expectations they had prior to enrolling.

There is little indication from these data that students are either disillusioned or dissatisfied with the institutions they are attending. In general, it appears that most of these 40,000 students believed they had a largely accurate understanding of what they were getting into when they enrolled.

Most students enrolled in career-oriented postsecondary institutions are convinced they are learning new skills that will help them find employment when they graduate.

A majority of them regard their educational experiences in the postsecondary institutions they attend as both better and more complex than those they encountered when in high school. Most, but not all, feel work required of them in their postsecondary classes is more difficult than was required of them while they were in high school (see Tables 5.2, 5.3, and 5.5). This is especially true of students attending community colleges. It is also true for a majority of students attending either a publicly supported postsecondary career school or a private career college. However, when asked to estimate the number of hours per week they spend studying outside of the classroom, most postsecondary students report they spend no more than five hours per week studying (see Table 5.6). This appears to be due primarily to the fact that, in most courses, students are asked to do all of their learning in the classroom. As a matter of fact, we could find very sparse mention of even the practice—let alone the importance—of homework. This may well be due to the fact that most of these students are holding either part-time or full-time paid jobs while enrolled at the postsecondary institution they attend. On the other hand, it is equally likely this may be due to the fact that, for much of the needed learning, having equipment available when learning takes place is considered an essential requirement.

A large percentage of these students believe their chances of finishing their entire program are either excellent or good.

In all three kinds of institutions, more than 2 in 3 students reported their chances are excellent (see Table 5.7). This is especially true in private career colleges, where more than 3 in 4 students reported their chances of finishing the entire program to be excellent. The familiar pattern in four-year colleges of finding roughly half of all entering freshmen failing ever to obtain a bachelor's degree is definitely not seen when data from students attending one of these three kinds of postsecondary institutions are examined. When these data are examined in order to obtain estimates of potential dropouts, no more than 1% of currently enrolled students in each of these three kinds of postsecondary institutions reported their chances of finishing their entire program to be poor.

This may be due in part to the fact that a majority of students from whom data were collected had been enrolled for six months or more prior to their participation in the CHS project. It seems likely that, had these data been collected during the first month of enrollment, a greater percentage of students might have chosen the poor response. This cannot be determined from the data

available to us. Follow-up data reported in chapter VII shows that, among all former students responding to the follow-up instrument, 87% reported they had finished the entire program in which they enrolled (see Table 7.1). This is obviously considerably higher than for most four-year college/university programs.

Finding suitable housing does not appear to be a serious problem for most of these 40,000 students.

The fact that housing is not an issue appears to be due largely to the fact that three out of four of these students chose to attend a postsecondary institution less than 25 miles from where they were living when they made the decision to enroll. This holds true for students attending private career colleges as well as for students attending either a community college or a publicly supported career postsecondary school.

There appears to be no doubt that geography is playing a major role in career decisions made by persons attending postsecondary career-oriented sub-baccalaureate institutions. Most persons elect to attend institutions close to where they are living. Thus, there is no strong need for the institutions to supply living quarters for their students (see Table 5.8–5.10).

To the extent that the variety of career programs available to prospective students is largely the same in all parts of a given state, it makes relatively little difference that persons are making career choices based largely on the programs available close to where they are currently living. On the other hand, to the extent that specific outstanding programs are available only in some—or even in only one—part of the state, a geographic bias in career decision making is almost sure to exist. There is an important need in almost all states to make provisions for allowing interested persons from throughout the state to enroll in all publicly supported career programs in the state.

It is in the area of expanding opportunities for choice that private career colleges often find the clearest expressions of need on the part of the general public. It is important that the wide variety of career programs offered by private career colleges as well as publicly supported institutions in the state be made known to prospective students statewide.

The availability of part-time or full-time jobs for students while enrolled is a very important factor in enrollment decisions made by persons considering some form of postsecondary career-oriented education.

Two out of three of the responding postsecondary students reported being employed either part-time or full-time while enrolled. Over half of these students report they are employed for more than 20 hours per week while enrolled and more than 3 in 10 students report they are employed at least 31 hours per week (see Table 5.12).

With the kinds of data available from the 40,000-student sample, it is difficult to define exactly what is meant by the term *full-time student*. Certainly, that

term does not refer to students who spend the major part of each day either attending classes or studying. As we indicated earlier, in a realistic sense it matters little whether a particular student is classified as either full-time or part-time. What really matters is the knowledge the student acquires and the skills he/she possesses.

It appears that the participating institutions helped about 1 in 5 students find part-time or full-time employment while they were enrolled, and about 2 in 5 students found such jobs by themselves (see Table 5.13). In spite of the obvious importance such jobs hold in terms of students being able to afford to enroll in programs, there appears to be relatively little emphasis by institutions upon helping students do so. This activity should hold a much higher priority for institutions than it apparently does at the present time.

As long as primary instructional objectives and activities center around helping students acquire career competencies, most of these students do not seem to require further motivation to learn.

The traditional problems found in K-12 educational settings associated with motivating students to learn do not appear to be found in most of these kinds of postsecondary career-oriented institutions. The most obvious exceptions are found in what are called "general education" courses required to obtain an Associate of Arts (A.A.) degree from an accredited community college. An abundance of evidence supports the importance of the A.A. degree in occupational success. This should be made clear to both staff and students.

In chapter 1 we described a 1960s predecessor to the CHS program known as the Specialty Oriented Student Research Program (SOS). Because publicly supported postsecondary career-oriented programs were not generally available at that time, this program concentrated on collecting data from persons attending postsecondary private career schools. One of the items asked postsecondary students "What's the biggest difference between this and other schools you have attended in the past?" Of several alternative answers students could choose, the most popular one by far was "Here we study only what we need to know—not things like poetry or history."

Because of our desire to work closely with community colleges, that question was never included on CHS data collection instruments. It is suspected that, if that item were to be administered to currently enrolled private career college students, the answers would be very similar in 2000 to what they were in 1962.

Although students use a wide variety of resources to solve their financial problems, no one resource is much more popular with students than the others.

The only exception to this generalization can be seen in responses given by students enrolled in private career colleges. There, 3 in 5 students report using federally insured student loans to help fund their educational expenses (see Table 5.14). When this is contrasted with the fact that federally insured student loans were reportedly used by fewer than 1 in 3 students both in career

postsecondary schools (22%) and in public community colleges (23%), the differences are dramatic. Since students in both of these kinds of institutions are fully as eligible to receive federally insured student loans as are students in private career colleges, it is difficult to understand why more are not doing so.

The most popular source of financial aid for students in all three types of institutions is funds supplied to them by their parents. About 1 in 4 students indicated this was true for them. The exception here, of course, can be seen in data received from students age 25 and older where only 7% listed parents/guardians as a source of financial aid.

There is a remarkable set of similarities in the percentages of students in all three types of institutions who make use of various kinds of financial resources. On the average, students in career postsecondary schools use the list of financial resources specified in Table 5.14 less frequently than do students in the other two types of institutions.

More private college students than either career postsecondary or community college students perceive their institution as helping students solve financial problems.

Almost half of students in private career colleges (49%) reported the institution was interested in discussing income with them as opposed to 1 in 3 from the other two types of institutions (see Table 5.15). Further, nearly 3 in 4 private career college students received help from the institution in seeking financial aid of some sort as opposed to about 1 in 3 students enrolled either in a career postsecondary school (39%) or in a public community college (33%; see Table 5.16). These differences are much too large to be ignored or judged as something that happened by chance alone. They are both statistically and logically significant.

Most postsecondary career-oriented students do not perceive a strong need to obtain and use more financial information than they currently possess regarding the institution they are attending.

Nearly half of these students were provided with what they regarded as accurate information regarding costs prior to the time they enrolled at their institution (see Table 5.19). Another 46% reported that, had they known the costs prior to enrolling, they would still have enrolled at the institution they currently attend. Fewer than 5% of these currently enrolled postsecondary students said they either probably or definitely would not have enrolled had they known in advance how much it would cost to do so.

Many parents have been sold insurance packages that serve as a kind of planned financial savings sufficient to pay the costs of attending a four-year college or university upon graduating from high school. It would be helpful if parental thinking on this matter were extended to include use of these funds for any legitimate, accredited kind of postsecondary education. If most parents could be helped to understand why this is important in protecting individual

career freedom of choice, it would help greatly in emphasizing both the need for and the importance of postsecondary career-oriented sub-baccalaureate education.

It would be inaccurate and misleading to conclude that all postsecondary students can solve their financial problems. The data available here were collected primarily from former students who had completed their program. Many persons who dropped out of the program they were taking without finishing may have had serious financial problems not evidenced in these data. It will be important to keep this in mind as the topic of how students can and are solving the financial problems they face in completing postsecondary career-oriented programs is considered.

The Counseling for High Skills (CHS) project served as a preliminary, not a comprehensive set of data aimed at discussion of the topic of student life at postsecondary career-oriented institutions.

There exists today a strong need to provide data that will be helpful in answering such questions as:

1. What recreational activities/facilities are available to students in career-oriented postsecondary institutions operating at the sub-baccalaureate level?
2. What institutional study facilities and assistance are available to students?
3. What health benefits and facilities are made available to students in these institutions?
4. What arrangements exist for those students whose part-time jobs make it necessary that they take some of their courses during the day and some during the evening hours?
5. What kinds of athletic programs exist at these institutions for use in community college intercollegiate athletics?

None of these questions can be answered in a satisfactory manner through CHS data. Another major data collection/analysis operation will be necessary before meaningful answers to these kinds of questions will be available.

Concluding Remarks

Student lifestyles at postsecondary sub-baccalaureate career-oriented institutions appear to be firmly centered around acquiring the specific career competencies being sought. Students do not attend such institutions primarily for socialization purposes. Neither do a majority of persons apply because of their felt need for general education. On the contrary, most of these students appear to have a clear goal of acquiring competencies and knowledge that will help them obtain good jobs in the primary labor market. This goal appears to be one shared with both instructional and administrative personnel at postsecondary career-oriented institutions.

Many of these institutions appear to be responding to these expressed needs in a positive and effective fashion. As both K-12 and adult education institutions increase their efforts to demonstrate the growing need for a variety of kinds of postsecondary career-oriented education, the number of persons—both youth and adults—seeking to enroll in such program seems sure to increase at a rapid rate.

When compared to operating costs at publicly supported four-year colleges and universities in most states, the operational costs of the kinds of postsecondary career-oriented institutions reported here are very small indeed. The societal need for graduates of these programs is fully as high as the need for four-year college graduates. It is past time the funds and facilities needed to meet these societal needs be made available in every state.

Chapter VI

How Do Current Students Rate Postsecondary Career- Oriented Institutions?

Prospective students at postsecondary career-oriented institutions are inclined to pay greater attention to evaluative judgments made by current and former students than to judgments the institution makes about itself. As with many other parts of this manuscript, responses are reported for (a) all students; (b) students in various kinds of postsecondary institutions, and (c) students under age 25 compared to students age 25 or older. This, of course, makes it possible to compare students in a variety of ways. It is important to recognize that the student populations used in forming these comparisons differ from one another. Thus, it would not be correct to compare, for example, the percentage of career post-secondary students (31%) with the percentage of private career college students (28%) who rated the institution they attended as outstanding and conclude that community colleges are better than private career colleges on this point. Instead, the proper conclusion is that community college students are more satisfied with the institutions they attend than are private career college students (see Table 6.1).

Appendix D contains 13 tables which, together, are intended to provide data related to how currently enrolled students rate the institutions they are attending. Careful study of these data leads to a number of generalizations. Following, each generalization will be stated followed by discussions concerning its implications. Student evaluative judgments are reported here in three categories including:

1. overall judgments.
2. judgments regarding instructors.
3. judgments regarding equipment.

Generalizations

Students attending career-oriented sub-baccalaureate programs tend to rate the institutions they attended as good but not as outstanding.

Data found in Table 6.1 make it clear that the modal rating of students in all six categories was good with over half of all students surveyed rating the institutions they attended in this way. However, somewhere between 1 in 4 and 1 in 3 students rated their institution as outstanding. The only category in which as many as 1 in 3 students chose the outstanding rating was for students age 25 and older. In none of the six categories shown in Table 6.1 did as many as 1 in 5 students rate their institution as either fair or poor. On the contrary, more than 8 in 10 chose either the good or the outstanding rating.

Generally, students attending career-oriented sub-baccalaureate programs believe the institutions they are attending to be very good. Almost 1 in 3 (29%) of all students rated the institution they attended as outstanding, slightly over half (57%) rated it as good, about 1 in 10 (11%) rated it as fair, and only 3 in 100 (3%) rated it as poor. It is these kinds of comparisons that can be expected to be used most often.

Data in Table 6.1 make it clear that, regardless of the type of institution or age of students, more than 8 in 10 current students rated the institution they are attending as either outstanding or as good. Only about 1 in 10 rated the institution as fair, and fewer than 1 in 20 rated the institution as poor. A slightly larger percentage of career postsecondary school students rated their institution as outstanding than did students from either private career colleges or public community colleges. The only other very noticeable difference can be seen by noting that 33% of students over age 25, as opposed to 26% of students under age 25, rated the institution they are attending as outstanding. Other than that, only very small differences exist with respect to either type of institution or age of student.

Generalization

The halo effect does not appear to be clearly present either in student ratings of their instructors or in student ratings of the institution in general.

The data in Table 6.1 show fewer than 30% of students judging the institution they attend to be outstanding. Had the halo effect been operating, it seems likely a higher percentage of students would have rated the institution in this manner.

Further, when students were asked to rate their institution in terms of overall quality on a 3-point scale (High, Medium, Low) no categories were found where as many as 2 out of 3 students rated the institution as high, and only with respect to ratings of program content and instructors did more students use the high opposed to either the medium or low rating (see Table 7.3). Had the halo effect been in full operation, it seems likely these figures would have been much more positive than this.

With over 1 in 4 students rating the institution they attend as outstanding and over half rating it as good, questions are again raised with respect to whether or not a halo effect seems to be operating. In one sense, the fact that only 1 in 4 rated their institution as outstanding while 3 in 4 gave their instructors a lower rating could be interpreted to mean there is not a strong halo effect operating. In an attempt to raise the halo effect question more strongly, Tables 6.2 and 6.3 have been prepared.

One way in which career-oriented institutions can be evaluated is to assess judgments of current students regarding their probable chances of securing jobs in the field for which they are being educated. More than 4 in every 5 current students feel their chances of getting a job in the field for which they are now training will be either excellent or good. Only about 1 in 10 current students judged their chances to be fair and fewer than 1 in 20 judged their chances to be poor or very poor. In general, current students have a great deal of confidence that they will find a job directly related to the educational program in which they are enrolled.

One way of determining whether or not these data should be attributed primarily to the halo effect is to compare them with the actual experiences of these students six months after they have left the institution for employment. When these data are compared with the follow-up data reported in chapter 7, these student projections appear to be very close to what actually happened. When follow-up data for all students are examined, (see Table 7.6), 57% of former students reported their job is exactly the kind of work for which they were prepared and an additional 28% reported it is somewhat related. Only 15% of students responding to the follow-up study reported the first job they had after finishing the program was not related to the educational program they had followed. This is very close to the judgments these students made while enrolled at the institution, where only 15% judged their chances of getting a job in their field to be less than good. The halo effect does not seem to be operating here.

Questions regarding the extent to which the classic halo effect exists with respect to these follow-up data are sure to be raised. Sometimes the data support a proposition that the halo effect is operating here, but at other times they don't. When asked to rate institutions on a 3-point scale (high, medium, or low) on five criteria, fewer than half of the former students rated the institution they had attended as high on three of these five criteria (see Table 7.3). Further, on one of the five criteria—quality of job placement assistance—more than 1 in 3 former community college and private career college students rated their former institution low. Had the halo effect been in full operation, it seems likely these figures would have been much more positive than this. On the other hand, when asked to rate their instructors or their instructional program, 3 of 5 students rated them as high, thus raising again questions regarding whether or not the halo effect is operating.

Student expectations while enrolled are highly related to job experiences of former students.

One way of demonstrating the parallel between expected and actual salaries can be found by examining the data presented in Table 6.3, where data from Item 58 of the CHS Student Survey are compared to data from Item 9 of the CHS Employment Survey.

It is likely these findings represent the truth as seen by present and former students. This is probably due, in large part, to the standardized data collection process used in the CHS program. This data collection process involved emphasizing to current students the importance of the following basic messages, each of which is intended to avoid contaminating the data because of the halo effect:

Dear Student:

- 1. the purpose of CHS is to gather information from currently enrolled students that will help prospective students decide whether or not they want to enroll here;**
- 2. we are not trying to make the institution look good and we are certainly not trying to make it look bad; instead, all we are trying to find is the truth;**
- 3. prospective students will pay more attention to your answers than to whatever others tell them about this institution; and**
- 4. prospective students will believe you are telling them the truth.**

Please don't let them down.

With this kind of orientation, current students have consistently reported in focus groups held shortly after data were collected that they did indeed tell prospective students the truth when they completed the CHS Student Survey.

When these data are combined and then compared in terms of expected as opposed to reported salaries, they appear as follows. Because of some missing data, these percentages do not always total 100%. In terms of wages, it can be seen that current students, on the average, expected they would have slightly higher weekly salaries than they in fact obtained six months after leaving the institution. The modal expected weekly salary was \$201-\$400. The modal obtained weekly salary was \$201-\$300.

Since the number of former students responding to the follow-up survey represents only a portion of those originally responding to the CHS Student Survey, it is clear the figures cannot be compared in an absolute sense. However, since every former student responding to the follow-up survey had responded earlier to the CHS Student Survey, some comparisons appear to be justified. When these comparisons are made, it can be seen that students' salary expectations while enrolled in the program are higher than the obtained wages reported by former students in every earning category—but not by much. The surprising thing is how close expectations are to obtained salaries. These data

suggest there is a large amount of realism in the perceptions current students have regarding their likely weekly wages after completing their program. Current students do not appear to hold unrealistic expectations concerning their likely earnings after leaving the program in which they are enrolled. To supply prospective students with data related to salary expectations of current students appears to be a very realistic thing to do.

Most students appear to be solving career problems they encounter.

Another way in which prospective students can evaluate a career-oriented institution can be found by assessing how difficult current students are finding it to be to solve various problems most students are expected to encounter. Near the end of the CHS Student Survey, students are asked seven questions pertaining to difficulties they may be experiencing with selected problems. If the problem exists for a particular student, he or she is asked to judge how easy or difficult it was to solve. Students who have not experienced the problem are asked to check the "not applicable" response option. The specific data for each of these seven items appear in Table 6.4. Five of the seven problems more than 50% of respondents marked the "not applicable" response regardless of the type of institution or age category. The very difficult response was chosen by fewer than 10% of students in all but two categories: public community college (10%) and Under age 25 (10%). Close to 10% of students in all categories chose the "somewhat difficult" response. With the large Ns involved here, even 10% represents about 4,000 persons—certainly a high enough number to warrant special kinds of help.

Other than the not applicable response, students chose the very easy response more often than any other of the seven responses from which they were asked to choose. Most students seem not to have faced these problems or found them relatively easy to solve.

Most students rate their instructors highly.

In an effort to encourage maximum participation on the part of postsecondary institutions, it was made clear from the beginning that no attempts would be made to evaluate specific instructors. Instead, students were asked to rate "all instructors I have had" at the institution they attended. For purposes of helping prospective students make decisions about possible enrollment at specific institutions, this was considered to be sufficient.

Some persons are almost certain to question the appropriateness of asking students to evaluate the instructors they have had. Some feel that students don't know enough to evaluate their instructors or their equipment in a valid manner. Those feelings are not shared by most of the current students at participating institutions. Table 6.5 provides data on this point.

Approximately 2 in 3 students consider themselves to be either very well qualified or well qualified to evaluate their instructors with another.

1 in 3 considering themselves to be qualified to do so. Fewer than 1 in 20

current students judged themselves to be either poorly qualified or very poorly qualified to make judgments regarding their instructors. Prospective students seem to share a belief in the ability of currently enrolled students to judge their instructors. These student judgments deserve serious attention.

Most students judge that their instructors know them well.

Responses of current students to Item 49, shown in Table 6.6, provide data related to the topic of student-instructor relationships. When asked to judge the degree to which their instructors know them, slightly over half of all students (58%) chose either the "all of them know me well" or "most of them know me well" response, with another 1 in 4 students reporting "some of them know me well." Only about 1 in 6 chose either the "few of them know me well" (10%) or "none of them know me well" (6%) response.

Sizable differences are found between the percentage of students in career postsecondary schools (31%) and the percentage in private career colleges (21%) who feel that all of their instructors know them well. However, if the percentages judging that either few or none of their instructors know them well are added together, these differences disappear, with only 17% of students in both categories making those judgments. Slightly more students under age 25 (59%) compared to students age 25 or older (55%) chose either the "all of them know me well" or "most of them know me well" response. In summary, most students enrolled in career postsecondary educational programs tend to believe their instructors know them pretty well.

In the kinds of student self-assessment measures used here, subjective terms such as "know me well" has to be defined operationally by each person responding to the question or looking at the responses. If a more standardized meaning is desired, it could be said that "know me well" means, for example, "understands why I am behaving as I am." There is no way of arriving at a single definition of what this means either to current postsecondary students or to prospective students trying to decide whether or not they want to enroll in a given program. In spite of that, this item is one in which prospective students express great interest. Answers given by currently enrolled students seem to be influencing decisions made by prospective students.

Most students rate the quality of their instructors as high.

Item 50 of the CHS survey, shown in Table 6.7, asked students to judge the quality of their instructors. When students raised questions regarding what we were asking them to judge, we responded that quality means "Do your instructors know their subject matter well? Do they know what they are trying to teach you?" Given this additional information, students reported little trouble in answering this question.

Currently enrolled students, in general, gave consistently high ratings to their instructors in terms of the quality of their efforts with more than 8 in 10 (81%) of all students rating the quality of their instructors as either very high

(37%) or high (44%). They seem to be very satisfied with the quality of their instructors. Sizable differences exist in the percentage of very high ratings given by students in career postsecondary schools (41%) and students in private career colleges (32%). These differences tend to reverse, however, when we examine the percentages of career postsecondary school students (39%) and private career college students (46%) rating their instructors as highly qualified. Students under age 25 (36%) tend to rate instructors slightly lower than do students age 25 or older (39%). No matter what category is used, fewer than 5% of students rated their instructor's qualifications as either low or very low.

These results are so favorable they are sure to again raise questions regarding whether or not the halo effect is operating here. There is, of course, no way of determining this for sure with these data. The best and only positive thing that can be done is to urge counselors to share these data with their clients and remind them that current students, while probably sharing their best judgments with prospective students, may be wrong because they had no way of knowing for sure if their instructors really do know the subject matter they are trying to teach students.

Most students feel they can get special help from instructors when needed.

Table 6.8 provides summary data showing the students' judgments of how easy it is to get help from instructors when needed. Once again, results were generally very favorable. For example, over 50% of students from all kinds of educational institutions and both age groups chose the highest possible response which is "there is always help when I need it." A larger percentage of students in private career colleges (57%) chose this response than did students in either public community colleges (53%) or career postsecondary institutions (53%). Students in both age categories chose essentially the same responses. Fewer than 5% of students in any category chose either the "there is usually not help when I need it" or the "there is never help when I need it" response.

In determining the extent to which help is available to current students when they need it, the "experts" are students themselves. True, instructors can engage in such helpful activities as posting and publicizing their office hours along with keeping written records regarding students who have sought help from them. While greatly appreciated, these records are not as likely to influence prospective students as much as the kinds of student data reported in Table 6.8.

Most students feel comfortable asking questions in the classroom.

Data in Table 6.9 report summary responses to the question, "How do you feel about asking questions in the classroom when you need clarification or additional information?" Here again, responses were much more positive than negative. For example, over 50% of students in every category chose the "I always feel comfortable asking questions" response whereas only 2% chose the "I never feel comfortable asking questions" response. A slightly lower percentage of public community college students (52%) chose this response

than did students in either private career colleges (58%) or career postsecondary school (58%). There were clear differences between the percentage of students under age 25 (52%) choosing this response and those age 25 or older (60%). In general, about 1 in 10 students chose either "I seldom feel comfortable asking questions" or "I never feel comfortable asking questions." This, too, must be considered a very favorable finding supporting instructors in these programs. Since this question asks currently enrolled students to judge how comfortable they feel asking questions, there is no alternative expert source to answer this question.

Based on the kinds of highly positive findings when students are asked to rate their instructors, it is concluded that, to some noticeable degree, the halo effect seems to be operating when ratings of instructors are provided. These students appear, by and large, both to like and to trust their instructors to teach them what they need to know.

Most students rate the equipment they use in a positive manner.

In addition to asking students to rate their instructors on a number of activities, students were also asked to rate the equipment they use in the classroom. A summary of student ratings of their ability to make judgments regarding their equipment is shown in Table 6.10. Here again, over 50% of students from each type of institution and from each age category replied they are either very well qualified or well qualified to make judgments about the equipment they use. Only 6% of students reported they are either poorly qualified or very poorly qualified to make these ratings. One in three students simply reported themselves to be qualified. Whether or not students really are qualified to judge the equipment they use in their educational programs is open to question. Based on these data, they clearly believe they are capable of doing so leaves little room for doubt.

Neither is there any doubt that prospective students are interested in and will pay attention to judgments currently enrolled students make regarding the equipment used in the program under study. Once again, whether or not they are right is open to question. Whether or not prospective students would regard such data as valuable is not open to question.

The reactions of students to the condition of their equipment are shown in Table 6.11. Approximately 1 in 3 students chose the highest possible rating: "All equipment is in good working condition." An additional 50% of students chose the second highest rating: "Most is in good working condition." Although about 1 in 10 students judged that about half of their equipment is in good working condition, no more than 5% judged that less than half was in good working condition and only 1 in 100 students reported "almost none of the equipment is in good working condition." In general, it seems safe to say prospective students can assume that most of the equipment they would be asked to use is in good working condition.

Most students judge the variety of equipment available for their use positively.

Responses to the variety of equipment available, shown in Table 6.12, indicate that no more than 6% of students in any of the three institutional categories or in the two age groups rated the variety of equipment available for their use as below average. On the contrary, close to 1 in 3 students used the highest possible rating—very good—in rating variety of equipment. The most common rating used was good with more than 2 in 5 students in each of the categories choosing this response. When data in the top two ratings—good and very good—are combined, about 3 in every 4 students in each of the categories were included.

Most students judge that the equipment they use is modern.

Summary data shown in Table 6.13 reported views of students regarding how modern their equipment is. Close to 6 in 10 students in all categories chose the “modern” response. No other possible response came close to this in terms of being chosen by students. Both the “very modern” (about 1 in 5) and the “somewhat outdated” responses (about 1 in 6) were next in line. Fewer than 5% of students chose the “very outdated” response to this item. The fact that this many students chose that response suggests that some equipment may be outdated, these data would suggest that isn’t common. Most of the equipment is judged by students to be modern.

Concluding Remarks

As shown in this chapter, postsecondary career-oriented students tend to have very positive views of their learning experiences at public community colleges, career postsecondary schools, and private career schools. A clear majority:

- would recommend the institution they attend to a friend in high school
- believe they have a very good chance of obtaining a job following their educational training and demonstrate this to be true when followed up six months after leaving the institution
- believe they will earn and do earn about \$300.00 per week on average in their first job after graduating
- judge that their instructors know them well
- judge they have high-quality instructors
- acknowledge they can obtain help from instructors when they need it
- report they feel comfortable asking questions in their classes
- judge that the equipment used in their educational program is both in good working condition and modern

Judging an educational institution based on evaluations provided by its present and former students can be considered an important evaluative tool for valid assessments of institutional worth. It would be foolish to evaluate institutional worth based only on evaluative judgments of present and former students. But would be equally foolish not to use such assessments. Certainly,

educational institutions are and must continue to be concerned about assessing the extent to which their programs meet clearly identified student needs. One of the best ways to determine if student needs are being met will be to ask the students. That, in fact, is what has been done in the CHS program.

One of the most important reasons to use items calling for student judgments and opinions is that, in the case of many problems, only students can honestly say how students feel. Students are properly considered the experts with respect to such matters. Conscious efforts have been made to construct CHS items where students are properly the experts needed to obtain valid answers.

A second important reason for discovering and reporting student judgments is that prospective students are inclined to pay special attention to such judgments as they make decisions concerning whether or not to enroll in a given institution. The most basic concern of CHS is to broaden the availability, understanding, and use of data that will enable prospective students to make sound, reasoned decisions regarding whether or not a particular institution or program is the best one for them. If this is to happen, systematic use of institutional ratings supplied by present and former students must take place. We hope that the data found in this chapter will be useful to many institutions as they engage in self-study and evaluation of their own programs and services.

Chapter VII

Employment Experiences of CHS Student Graduates

One part of evaluating career-oriented educational institutions is what happens to their graduates. The principal sources of information on this topic are institutional leavers themselves, both graduates and dropouts. Did the institution do for its students what those students expected it would do? To answer this question, there is no source of data superior to former students. Judgments made by former students represent the major topic of this chapter.

The CHS program calls for initial follow-up of former students to take place six months after they have been scheduled to graduate. When the first CHS follow-up study was undertaken, initial survey data had been collected from a total of 39,940 postsecondary students. Of these, a total of 39,461 former students met this departure criterion. This includes (a) 22,541 community college, (b) 6,492 private school, and (c) 10,428 public vo-tech students. The CHS Employment Survey was mailed to these persons beginning in February 1996. The deadline date for inclusion in this project was March 1997. By that time, data that were usable in some way had been received from 9,524 former students. This is a response rate of 24.1%.

Of these 9,524 former students, a total of 7,630 had responded positively to a request for their social security number. A total of 1,894 former students failed to answer the item asking for their social security number. For those 1,894 persons, we had no way of separating the data by type of institution. Thus, whereas follow-up data for all students include 9,524 former students, follow-up data by type of institution were available from only 7,630 former students. We had response rates specifically for (a) 1,667 former public vo-tech students (16.0% response rate), (b) 1,250 former private school students (19.3% response rate), and (c) 4,713 former community college students (20.9% response rate).

One way to judge the representativeness of the follow-up data found in Appendix E, Tables 7.1–7.17, is to compare the percentage of students from each of the three types of institutions in terms of (a) percentage of those from

whom initial data had been collected; and (b) percentage of those responding to the follow-up study. These figures are:

- **Public Postsecondary** Initial data collected from 26.4% of students vs. follow-up replies collected from 21.8%.
- **Private Career College** Initial data collected from 16.5 of students vs. follow-up replies collected from 16.4%.
- **Community Colleges** Initial data collected from 57.1% of students vs. follow-up replies collected from 61.8% .

Based on these data, it seems safe to conclude that no serious bias exists with respect to the percentage of students from each of the three types of institutions from which initial data were collected compared to the percentage of former students from each of these types of institutions from which usable follow-up forms were received.

Reports of Former Students Regarding Completion of Their Educational Program

Table 7.1 reports the percentages of former students who reported having completed all or part of the educational program in which they enrolled. A large majority of students from various kinds of institutions and of different ages reported they finished all of the program in which they had been enrolled. This includes 9 in 10 former students from both career postsecondary schools and private career schools. A modest drop was seen in data received from former community college students where 86% reported completing the entire program. A similar drop can be seen in the 87% of students under age 25 who reported completing the entire program compared to the 91% of students age 25 or older who had done so.

When the "all students" column is studied, it can be seen that 87% of the 9,524 students returning the follow-up instrument reported they had completed the entire program. Data reported previously make it clear that almost all of the students to whom the follow-up instrument was sent had been due to complete the entire program more than six months prior to receiving that instrument.

Thus, it seems reasonable to conclude that the dropout rate for all students enrolled in specific career-oriented programs is 13% in this study. The total dropout rate would likely be higher than this because it would include students who were not yet enrolled in a specific career-oriented program. The total also would include students who had enrolled only for specific job skills courses, for purposes of career exploration, and students who left for a host of other reasons. While we had no way of calculating that figure, we can assume it would be somewhat higher than the 13% reported here for students in specific programs.

Table 7.2 contains former student reports of the types of degrees or certificates they received upon completion of their educational program. The most surprising aspect of these data is that 54% of former private career college students report they have received an associate's degree. A second interesting aspect of the data is that, whereas 2 in 3 former community college students reported having

an associate's degree, almost 1 in 6 reported they had received a technical certificate or diploma.

It can be seen in Table 7.2 that 7 in 10 former career postsecondary school students report having received either a professional certification or a technical certificate/diploma. Programs leading to these kinds of recognition should be producing graduates with the kinds of skills needed for success in the high-skills information age. Data reported later in this chapter on a variety of related topics provide at least cursory findings leading to a belief that these programs are indeed producing highly skilled workers.

Finally, Table 7.2 demonstrates that approximately 1 in 10 students reported receiving neither a degree nor a certificate of some kind. This percentage is most pronounced for community college students who are under age 25. Since each of these students was enrolled in a specific career-oriented program, there must be reasons why they failed to complete it. A major reason could well be that they were engaged more in career exploration than in career preparation. If that is the major reason, there is apparently little to be concerned about here.

Former Student Evaluations of the Educational Programs in Which They Enrolled

Former students were asked to rate the educational programs they had attended on five different criteria. Table 7.3 contains the percentage of former students who rated the postsecondary institution they had attended as high, medium, and low on each of five criteria. A short summary of ratings on each of these five criteria is presented here.

Quality of Program Content

As shown in Table 7.3a fewer former private career college students (48%) rated the quality of program content as high than did students from both career postsecondary schools (60%) and public community colleges (64%). Since each former student rated only the type of institution he/she attended, there is no way of comparing the data and then concluding that the program content of private career colleges is rated lower by all former students than is true for either career postsecondary schools or community colleges. The important information found here is that in no setting or in no group did more than 6% of students rate the quality of the program they attended as low.

Quality of Instructors

Table 7.3b shows that over half of these former students in all three settings and in both age groups rated their instructors highly. Moreover, fewer than 8% rated them as low while about 1 in 3 rated their instructors as medium. On none of the other five kinds of ratings were responses as favorable as these; former students rated their instructors more highly than they rated any other topic on which they were asked to make judgments. It appears most of these former

students believe they received high-quality instruction and were appreciative of their instructors.

Use of Technology.

Table 7.3c shows that in no comparison made here did as many as half of former students give a high rating to the institution's use of technology. On the other hand, only about 1 in 10 former students rated the institution they attended as low in terms of use of technology. The most common rating given was medium. This was true in only one other of these five comparisons (quality of equipment).

Job Placement Assistance

Table 7.3d shows former students gave their lowest ratings on this criterion with roughly 1 in 3 rating the job placement assistance they received as low. Ratings of high were given by a higher percentage of private career college students (39%) than by either career postsecondary school (31%) or community college (26%) students. High ratings were given more often by former students under age 25 (28%) than by those age 25 or older (21%). These findings suggest that the quality of job placement assistance available needs to be substantially improved.

Quality of Equipment

As shown in Table 7.3e the most popular rating for quality of equipment was "medium" with slightly over 50% of former students in each type of institution and close to 50% of both students under age 25 and over age 25 giving this rating. Almost 1 in 3 former students rated the quality of their equipment as high and fewer than 20% of former student in each type of institution rated it as low. There was a distinct difference between the two age groups with former students under age 25 (33%) giving a much higher rating than those age 25 and older (26%).

Satisfaction with the Postsecondary Institution Attended

Former students were asked to respond either "yes" or "no" to the question "If you had the opportunity to start again, would you go to the same postsecondary institution and take the same program?" In order to answer "yes" to this question, the respondent must agree with both (a) "would you go to the same postsecondary institution?" and (b) "would you take the same program?" Thus, a "yes" response to this item indicates definite satisfaction with both the institution and the program.

Table 7.4 contains data showing that almost 3 in 4 of all students from whom data were collected (72%) answered this question "yes." This was true for students from both career postsecondary schools (77%) and community colleges (75%). It is clear that a large majority of former students from these types of

institutions are satisfied with the choices they made both with respect to the institution they chose to attend and the program in which they chose to enroll.

That same degree of satisfaction cannot be seen when responses given by former students in private career colleges (58%) are examined. While clearly a majority are satisfied, the responses are not nearly as positive as those from former students at other kinds of institutions. The data needed to analyze this finding in detail are not available here. It may be due to a variety of factors, including such diverse reasons as (a) current awareness of how they could have obtained the same education a lower cost by enrolling in a publicly supported institution or (b) the presence of persons who now feel they made the wrong occupational decisions. This is obviously a topic that private career college leaders and faculty will want to study thoroughly.

Concluding Statement Regarding Former Student Evaluations of Their Educational Programs

In general, these former postsecondary students rated the institutions they attended and the professional staff in these institutions favorably. Only with respect to job placement assistance did as many as 1 in 3 former students assign a low rating. Even with this most negative finding, more than 6 in 10 former students from all three types of institutions and both age groups rated this factor as either high or medium.

It is especially rewarding to find that almost 3 in 4 of all former students would, if they had it to do again, enroll in the same program in the same institution. These former students clearly rank high in customer satisfaction. Their opinions should be meaningful to prospective students and to others who evaluate postsecondary career-oriented sub-baccalaureate institutions.

First Jobs of Former Students After Leaving the Institution

One of the questions most frequently asked by prospective career-oriented students is "What's likely to happen to me if I graduate from this program?" In order to help answer this question, we asked former students several questions regarding the first jobs they found after leaving the institution. Their responses to these questions are discussed here.

How did former students learn about the first job obtained after leaving the institution?

Table 7.5 contains data from two follow-up items related to the question of how students found their first jobs. One question asked students to report the kind of person who helped them learn about the first job they obtained after leaving the institution. The most common answer, provided by about 1 in 4 former students (24%) was that they found the job themselves. About 1 in 5 of all former students identified two sources: (a) institution personnel (23%) and

(b) friends or relatives (22%). Quite different responses were reported by former private career college students, with more than 1 in 3 of these students (35%) reporting that after leaving the institution they learned about their first job from institution personnel. It appears private career colleges, on the average, do considerably more in helping their students find job openings after graduation than do institutional personnel in either career postsecondary schools or community colleges. These differences are too large to be ignored.

The second question for which responses are found in Table 7.5 asked former students if institutional personnel had helped them make arrangements for an interview with a possible employer when they were leaving the institution and seeking employment. The percentage of students reporting personnel at the institution did arrange for such an interview can be seen under the "Item 6" heading.

Here, marked differences were found in "Yes" responses given by former students from career postsecondary schools (23%), from private career colleges (17%), and from public community colleges (37%). These findings, when contrasted with those in the "Institution personnel" row, suggest that, although private career colleges led the way in helping students first learn about available jobs, former students from community colleges most often received help from institutional personnel in arranging for interviews with prospective employers. This is a topic in need of much more research and study.

Was the first job obtained after leaving the institution related to students' educational programs?

Table 7.6 suggests answers to this question. Instead of asking former students to respond with a simple yes or no answer. We asked students to differentiate between jobs that were exactly related versus somewhat related versus unrelated. With the sole exception of responses from former private career college students, over half of the students in each category reported their first job after leaving the institution was exactly related to the educational program they had pursued. If "exact" and "somewhat" judgments are grouped, it can be seen that about 85% of students in every category—including private career colleges—reported their first jobs after leaving the institution were related to their area of preparation. These are very positive findings.

However, we must not overlook the fact that approximately 1 in 6 students in each category reported their first job after leaving the postsecondary institution was not related to their educational program. There is a great need to gather data from these former students in an effort to explain why their first job was not related to their educational program. For a particular student, for example, the reason could be due primarily to the fact that her/his spouse is employed in a community where there are few jobs for workers with the kinds of skills taught in this program. Whatever the reasons are, they should be made available to prospective students and their parents/spouses at the same time the more favorable findings reported in Table 7.6 are discussed.

What were the weekly wages obtained by former students on the first job they found after leaving the institution?

Table 7.7 contains data needed to answer the question of earnings. The most frequent answer given by former students was \$201–\$300 with close to 1 in 3 former students giving this response. The second most frequent response, given by about 1 in 4 students, was \$301–\$400. Among former students in the age 25 or older category, the second most frequent response was \$401–\$599. If data in the \$201–\$300 and \$301–\$400 categories are combined, it can be seen that roughly 2 in 3 former students earned that wage range in their first job after leaving the institution.

In general, it can be seen that fewer than 1 in 5 former students reported they earned \$200 or less on their first job after leaving the institution. It can also be seen that fewer than 10% of former students reported they earned \$600 or more on the first jobs they found after leaving the institution. By studying the entire range of responses, clues become available regarding both what is possible and what is likely in terms of earnings.

Did the skills learned in their educational program help students do better work on the first job they secured after leaving the educational institution?

Table 7.8 provides data about whether students learned skills that improved their job performance. Again, with the sole exception of former private career college students, over half of all responding students reported the skills learned in the educational institution they attended were lots of help in doing better work on their first job after leaving the institution. When the “lots of help” and “some help” responses are combined, approximately 85% of all former students in each of the six categories (including former private career college students) were identified. Former students 25 years old or older responded more favorably than those under age 25 (54%). In no category did as many as 10% of former students choose the “No, not much help” answer. Here again, findings appear to be highly favorable to these students and to the educational institutions they attended.

It is difficult to interpret the findings reported in Table 7.8 showing that 7% to 8% of these former students marked the “does not apply” response to this item. It could, of course, mean they were unemployed and an average of 3% reported this (see Table 7.13). On the other hand, it could mean they had no previous job with which to make comparisons.

Would former students have been hired for the first job they found after leaving the institution had they not obtained the kind of education they received at the institution?

Data aimed at identifying how significant students' education was in their obtaining employment are found in Table 7.9. Roughly 1 of 5 former students in all six categories reported they were quite sure they would have been hired for the first job they found after leaving the institution even had they not obtained

the education provided by the institution. When data in the "quite sure" (17%) and "probably" (18%) categories are combined, more than 1 in 3 former students are represented.

On the other hand, between 57% and 67% of former students reported they probably would not have been hired for the first job they found had they not obtained the kind of education they did. Although it is to be hoped that this percentage will be even more favorable in the next few years, this is a positive beginning and a finding worth publicizing.

It is equally important to note the sizable differences in those former students under age 25 (57%) and those age 25 and older (67%) who judge they would probably not have been hired for their first job after leaving the institution had they not obtained this education. If these former students are accurate in these judgments, it is clear that effective career-oriented education does make a difference in gaining the first job, especially for those age 25 or older.

How satisfied were former students with the first job they obtained after leaving their educational institution?

The question of job satisfaction is answered by examining data found in Table 7.10. Roughly 1 in 3 former students in all six categories reported themselves to be very satisfied with the first job they found after leaving their educational institution. Another 2 in 5 declared themselves to be satisfied. When "very satisfied" and "satisfied" responses are combined, they account for roughly 3 in 4 of the former students. About 1 in 5 former students reported themselves to be either slightly dissatisfied or very dissatisfied with the first job they obtained after leaving their educational institution with 1 in 10 being very dissatisfied. When data from former private career college students are examined, it can be seen that more than 1 in 4 students are dissatisfied. In general, these data can be said to be positive in nature.

Judgments of former students under age 25 compared to those of former students age 25 or older are very similar. In both age groups, about 3 in 4 former students reported themselves as very satisfied or satisfied with the first job they obtained after leaving the educational institution.

This does not mean the nearly 1 in 10 reporting themselves to be very dissatisfied should be ignored. If this percentage were repeated nationwide, it would amount to many thousands of former students. Nevertheless, of course, the institutions alone cannot be held responsible for job satisfaction, because the employer and the individuals themselves share that responsibility. There is an obvious need to continue efforts to place recent graduates in jobs that appeal to them.

How does the first job found after leaving the educational institution compare with the kinds of jobs former students had expected to find?

Data in Table 7.11 helps answer the question of job expectations versus reality. Over half of former students in all six categories reported the first job

they found after leaving the educational institution was "about what I thought it would be." About 1 in 5 former students (except for those from private career colleges) reported their first job was better than they had expected it to be, whereas about 1 in 6 (1 in 4 for former private career college students) reported it to be worse than they had expected.

When the percentage of former students in the "better than I thought" category (19%) is combined with the percentage in the "about like I thought it would be" category (58%), more than 3 in 4 former students are included. These data indicate that many more former students are pleased than are displeased with the first job they found after leaving the institution. Once again, it is difficult to understand the meaning of the "does not apply" response. Here, it could mean that 1 in 10 of these former students were simply returning to the same job they held prior to enrolling in the institution and were using what they had learned in the institution as a means of improving their performance on that job.

Current Jobs Reported by Former Students

Section IV of the CHS Employment Survey asked former students to compare the last job they held prior to enrolling in their education program with their current job. This is obviously one way of determining whether or not it benefits persons to seek skills acquired through enrollment in postsecondary programs.

In order to maximize the coverage of this item, respondents were asked to compare these two jobs in terms of (a) overall job satisfaction, (b) enjoyment derived from the work, (c) how well suited the person is/was to the job, (d) weekly pay, (e) chances for advancement, and (f) chances of keeping the job. For each of these characteristics, former students were asked to judge if their current job is better, about the same, or worse than the last job they held prior to enrolling in the educational program they pursued. Answers are provided in Table 7.12.

Is the current job judged to be better than the last job held prior to enrolling?

Data in Table 7.12a show that about 2 in 3 former students from each of the three types of institutions and from both age groups reported their current jobs to be better than the last job they held prior to enrolling on all six of these criteria. Slightly fewer than 6 in 10 former students from private career colleges, public community colleges, and age 25 and older categories judged their current jobs to be better than the last job they held prior to attending the institution in terms of their chances of holding that job. Other than these three exceptions, all other categories found at least 6 in 10 reporting their current jobs to be better.

Many prospective students will probably interpret these data to mean they are likely to find better jobs if they acquire the skills taught in these educational institutions. This is especially true for the 3 in 4 former community college students under age 25 reporting their weekly pay is better now.

The largest differences in former student reports are found when responses of students under age 25 versus age 25 and older are compared. Table 7.12a provides data related to this matter. The first notable finding is that, on all six of the qualities to be rated, over half of persons reported things are better now in all six categories. There are no exceptions here.

Markedly higher percentages of former students under age 25 as opposed to those age 25 or older chose the "better now" response with respect to (a) weekly pay, (b) chances for advancement, and (c) chances of keeping their current job. This may well be due to the fact students age 25 or older tended, on average, to have had better jobs prior to enrollment in the educational institution than did persons under age 25. This finding confirms the prediction that many of today's displaced workers are going to have to accept lower-paying jobs than they previously had if they hope to get back in the primary labor market.

Only on the "chances of keeping my job" criterion did fewer than 60% of former students in (a) private career colleges, (b) public community colleges, and (c) students age 25 or older report things are better for them now. In all three of these over 50% but less than 60% reported things are better now.

Current job judged to be about the same as last job held prior to enrolling.
In Table 7.12b roughly 1 in 3 former students reported they judge their current job to be about the same as the last job they held prior to enrollment in the educational institution they attended. This means that about 2 in 3 former students judged the institution they attended in other ways on these six qualities. A slightly more accurate statement can be made by considering each of the six factors to be judged.

1. Overall job satisfaction was rated about the same by 1 in 4 former students.
2. Enjoyment of the job was rated about the same by 1 in 3 former students.
3. Suited for the job was rated about the same by 1 in 3 former students.
4. Weekly pay was rated about the same by 1 in 5 former students.
5. Chances for advancement were rated about the same by 1 in 4 former students.
6. Chances of keeping their job were rated about the same by 1 in 3 former students.

It is clear these are sizable minorities whose judgments are deserving of careful attention. Most of these former students have probably been exposed to the expression "education pays" on numerous occasions. If about 1 of 3 former students feel the jobs they obtained after completing their program are no better than the jobs they held prior to enrolling in the institution, it should not be surprising if they are less than fully satisfied with the institutions they attended.

Current job judged to be worse than the last job held prior to enrolling.

Data found in Table 7.12c indicate that about 1 in 20 former students reported their current jobs to be worse than the jobs they held prior to enrolling in the institution in terms of (a) job satisfaction, (b) job enjoyment, (c) how well suited

they are for the job, and (d) chances of keeping the job. Even more negative, about 1 in 10 former students reported their current job to be worse in terms of (a) weekly pay and (b) chances for advancement.

A clue as to what might have happened here can be found by examining the very sizable differences in responses given by former students under age 25 compared with former students age 25 and older. When these data are compared, it can be seen that a higher percentage of former students age 25 and older are more dissatisfied than are students under age 25 for each of the six qualities rated. It may be that many persons age 25 or older enrolled in their institution after having been displaced from their former jobs because their skills were no longer considered needed there. This is something that appears likely to continue at an even faster rate in the years ahead. As the United States moves still further into the Information Age, there are sure to be many times current workers will find their jobs have been eliminated, and they will have to acquire new job skills if they want to regain employment. When this occurs, it should not be surprising to find that on these six criteria, individuals whose first job after leaving the postsecondary institution do not equal or exceed the last job they held before enrolling in the institution.

Reported hours worked per week on current job.

Data in Table 7.13 show that more than 95% of all former students reported themselves to be currently employed. Only 3% to 4% reported themselves to be unemployed. This is very close to current national unemployment statistics. The most common average number of hours per week reported was in the 31-to 40-hour range, with close to half (47%) of these students falling in this range. Slightly over 1 in 3 of all students (37%) reported themselves to be working over 40 hours per week. When these two figures are combined, they total close to 9 in 10 of all students.

Only very slight differences exist in student reports from any of the three types of institutions or in different age categories with respect to employment. Full-time employment is obviously available to almost all persons completing some kind of postsecondary career-oriented sub-baccalaureate educational program.

Reported benefits provided to these workers by their employers.

Data in Table 7.14 show the most common employer benefit reported for all former students in their current job is health insurance (61%) followed by life insurance (44%), retirement benefits (43%), and dental insurance (43%). In addition, about 1 in 3 former students reports having disability insurance (35%) and 1 in 20 (5%) reports having day care facilities provided by their employer. With the exception of health insurance, it appears few other benefits are available to more than about 2 in 5 former students.

These are disappointing data for those hoping graduates from participating postsecondary institutions would find employment in the primary labor market

where employer benefits are typically generous. These data make one suspect that perhaps a majority of these former students may still not have found positions with the multiple kinds of employer benefits typically available in the primary labor market. That suspicion cannot be tested with these data.

In providing these data, students were asked to mark each option provided by their current employer. If the benefit was not provided, they were asked to make no marks. This may have led to a situation where a majority of former students left most of these six possible benefits unmarked. Thus, an unmarked space is interpreted to mean the student said the benefit was not provided. The alternative possible explanation—that the former student simply failed to answer the question—was not considered here.

Are former students employed in nontraditional jobs for their gender?

Former students were asked to respond to this question by choosing one of three possible answers. These answers and the percentage of former students choosing each of them are: (a) "Yes" (8.7%); (b) "No" (79.3%); and (c) "I don't know" (12.1%).

These data, shown in Table 7.15, suggest that about 1 in 10 former students report themselves to be employed in a nontraditional job for their gender. Unfortunately, the need to make the follow-up instrument short prevented efforts to discover how their employment experiences were affected, if at all, by being employed in such a job.

The fact that almost 1 in 8 of these former students (12%) reported they didn't know whether or not they are employed in a non-traditional job for their gender is interpreted to mean they do not feel discriminated against with respect to job placement because of their gender. Ideally, we can hope that large increases in the percentage of former students choosing this response will occur in the near future as efforts to move toward non-discrimination are increased. Although as more nontraditional gender placement occurs, those jobs will gradually be less likely to be considered non-traditional for either gender. Even if it could be shown that gender differences continue to exist in many occupations, that could not be validly interpreted to mean more remains to be done in this area. Some occupations do continue to appeal to men much more than to women—and vice versa.

Employer provisions for former students with disabilities.

The last two items on the follow-up instrument asked former students to indicate whether or not (a) it was necessary for employers to make special accommodations for their employment and (b) were such accommodations satisfactory.

With respect to the first question, a total of 165 former students (2%) reported it was necessary for their employer to make some special accommodations for their employment. A total of 906 (12%) former students answered this question by saying it was not necessary. We interpret this response to mean persons

with some kind of disability that their employers were able to handle without making any special provisions. Finally, 6,813 former students answered by choosing the "not applicable" response, thus indicating they do not have disabilities that need to be taken into account in their employment settings. These data are shown in Table 7.16.

With respect to the second question, 138 former students reported accommodations made by their employer were satisfactory, 29 reported they were not satisfactory, and 48 reported themselves as being "uncertain" whether or not these accommodations were satisfactory. A total of 4,607 former students marked the "not applicable" response to this item, as shown in Table 7.17.

With only 29 of these 9,524 former students reporting that employer accommodations for persons with disabilities were unsatisfactory, this finding must certainly be regarded as generally favorable. This does not mean that there is no need to search for ways to better meet the needs of these 29 students.

Concluding Remarks

This chapter has reported follow-up results obtained from 9,524 former students including subsamples of (a) 1,667 former public vo-tech students, (b) 1,250 former private career college students, and (c) 4,713 former community college students. The data were collected almost exclusively from former students who had left the educational institution for employment approximately six months prior to being asked to participate in this project. Their feedback will be of interest primarily to persons who value a customer satisfaction approach to evaluating institutional worth. Whether considered to be "right" or "wrong" by others, former students in the kinds of institutions involved here believe themselves to be qualified and capable of judging the worth of the institutions they have attended. It is likely that prospective students will also value these judgments made by former students.

At several places in this chapter, the topic of the halo effect has been discussed. After studying all of these data, we have concluded that, although the "halo effect" in student ratings of instructors, it does not appear to be obvious in ratings of other aspects of the program.

The findings reported here are generally positive in nature. This can easily be seen by noting several examples:

1. Almost 90% reported finishing all of the program in which they had enrolled.
2. More than 50% of former students rated their instructors highly and only 5% rated them as low.
3. Almost 3 in 4 former students reported that, if they had it to do again, they would enroll in the same institution and choose the same program.
4. Over 50% of former students judged the first job they found after leaving the program to be exactly related to their educational program.

5. Over 50% of former students judged the skills they had learned in their education program were lots of help in doing better work on their current jobs.
6. Two in three former students judged the first jobs they obtained after leaving the education program to be better than the last job they held prior to enrolling in the institution.
7. More than 3 in 4 former students reported the first job they obtained after leaving the institution to be as good or better than they had expected it would be.
8. More than 95% of former students reported themselves to be now employed.

There were plenty of negative findings to go along with the positive ones. Among the findings classified here as negative are the following:

1. In no comparison made here did as many as 50% of former students judge use of technology in their educational institution as high.
2. More than 1 in 3 former students from all three kinds of institutions rated the job placement assistance they received from the institution as low.
3. Over 50% of former students rated the quality of equipment as no more than medium.
4. About 1 in 4 former students believed they could have obtained their first job after leaving the institution even if they had never attended it.
5. Three former students reported the first job they obtained after leaving the institution to be no better than the last job they held prior to enrolling in the institution.

The examples presented in this chapter are intended to give a general impression that former students tended to rate the career-oriented programs in which they had enrolled in a more positive than a negative manner. It seems obvious that wide differences in findings can be expected when only selected portions of these data are considered. It seems equally obvious that the most meaningful and appropriate use of such information will be discovered when CHS data are collected from current and former students in specific programs in specific institutions. It is at these times the kinds of data collected here will be most meaningful to prospective students in making decisions their possible enrollment in some kind of postsecondary career-oriented sub-baccalaureate education.

Still, the kinds of general findings reported here will be valuable. The majority is right more often than wrong when the customer satisfaction problem is considered. A clear majority of both present and former students reported themselves pleased they had decided to enroll in the institution and pleased with their experiences both as a student in the institution and as a paid worker

after leaving. These kinds of favorable findings deserve the attention of all persons concerned with education/work matters.

Chapter VIII

Challenges to Career Development for Tomorrow's Youth

The concept of excellence is applicable to all kinds and at all levels of education. It remains a common goal toward which all professional educators strive. Emergence of the Information Age has brought about a variety of changes in career development needs of both youth and adults to which the concept of excellence needs to be applied. Among the major changes that have taken place in the last twenty years, the most important include:

1. The need for high school leavers to secure some kind of postsecondary education to enable them to enter the primary labor market;
2. The need for an increase in level of career skills by workers in all occupations competing in the international marketplace;
3. The need for almost all workers to choose several different occupations during their working years;
4. The crucial and growing need for almost all workers to acquire general employability/adaptability/promotability skills that are valuable in all occupations; and
5. The need for providing quality career development for all persons — youth and adults, women and men, minority and non-minority— persons.

While each of these changes has been identified during the last twenty years, none of them can yet be said to have been widely implemented in the occupational society. We will provide a series of educated guesses regarding the probable impact these five major kinds of changes are likely to have upon career development of persons preparing for entry into the occupational society during the next ten to twenty years.

The Growing Need for Short-Term on-the-Job Training

Data presented in chapter 2 account for a total of 50,562,000 projected job openings due to a combination of growth and net replacement needs during the 1996–2006 period. Of these, 21,944,000 (43%) are projected to require only two to three weeks of short-term on-the-job training. Those of us who are today urging almost all high school graduates to seek some kind of postsecondary education must keep in mind that two in every five job openings will, in effect, require only slightly more than a high school diploma. Most of these short-term on-the-job-training jobs are expected to be in the secondary labor market where low pay, few fringe benefits, no job tenure, and only slight opportunities for substantial promotion exist. High school graduates armed with only a diploma and the desire to be employed are most apt to find these kinds of jobs. Many new high school graduates will, primarily because of their perceived income needs, seek to secure these kinds of jobs in spite of their very limited opportunities for career advancement.

Employers seeking workers who can successfully complete short-term on-the-job training are looking for persons with (a) good basic academic skills, (b) productive work habits, (c) personal work values that lead them to want to work, and (d) interest in and ability to learn specific occupational skills required on the job. *The concept of excellence is fully as applicable to performance on these jobs as it is to jobs requiring more education.* Prospective workers with these qualities are expected to have little difficulty securing such jobs. Those deficient in these qualities are apt to find employers hesitant to provide them with *any* kind of on-the-job training.

If high school graduates seek no other kind of postsecondary education, they are apt to remain employed in secondary labor market jobs with frequent job changes made necessary by changes in the occupational society. Such persons will find it advisable to avoid committing themselves to any *specific* occupational choices. Instead, they will find it necessary to shift from one occupation to another depending on job vacancies available to them. Their human needs for *accomplishment* will, for many of these persons have to be met largely through how they spend their leisure time and family affairs.

With over 40% of projected jobs during the 1996–2006 period requiring less than three to four weeks of on-the-job training, it is clear a serious social need exists to make sure the annual income of such workers will be enough to provide them with a minimally satisfactory lifestyle. This seems almost sure to require two paid workers in most families. Most of those families with only one wage earner can be expected to have serious financial problems.

The financial perspective of many high school students is limited because of part-time jobs they hold while in high school. When they compare the amount per week they earn in these part-time jobs with what they are likely to be paid if they become full-time workers, it may appear their financial condition will be significantly improved if they take whatever paid jobs they can find when

they leave high school. They need to understand that, in the absence of further education, they have small chances of getting substantial pay raises after a few years on these jobs.

School counselors face a major challenge in their efforts to help these new high school graduates understand these realities as they make postsecondary plans. Because of their perceived income needs, it is likely that many new high school graduates will continue seeking employment in the secondary labor market. School counselors should help all of these students understand that their best way out of the secondary labor market will be to secure either some form of moderate or long-term on-the-job training or some kind of formal postsecondary education. Education is the primary path out of poverty for most persons.

Projected Jobs Calling for Four-Year College Graduates or More

At least 70% of both high school students and their parents appear to be convinced that a four-year college program leading to a bachelor's degree or more is the best possible way to prepare for employment. At the same time, the Bureau of Labor Statistics has predicted that 70% of job openings expected between 1992 and 2005 will not require a four-year college degree (OCCChart, 1994) *When 70% of youth are preparing to do jobs that 70% are not likely to get, something is wrong.*

The total number of job openings requiring a bachelor's degree or higher is expected to total 11.5 million during the 1994-2005 period (OCCChart, 1995-96). Of the projected 50,562,000 new job openings due to growth and net replacement needs expected during the 1996-2006 period, a total of 12,296,000 (24.3%) are predicted to require a four-year college degree or more. If only the 26.3 million new jobs are studied, it can be seen that a total of 8.0 million (30.4%) are projected to require a bachelor's degree (OCCChart, 1994). Yet, other research indicates that, of the 2.7 million youth who graduated from high school in 1996, about 1.7 million were attending college in October accounting for 69.7% of women and 60.1% of men (USDOL, 1997). Considering the expected number of jobs requiring a four-year college degree, an annual surplus of about 300,000 four-year college graduates has been projected (Shelley, 1996). Shelley has predicted that the percentage of four-year college graduates expected either to end up in jobs not requiring a four-year college degree or to be unemployed is expected to grow from 18% to 22% during the 1994-2005 period. The primary reason this figure is not higher is that 50% of those who initially enroll in four-year college programs never obtain a bachelor's degree (National Center for Education Statistics, 1995). If all who initially enrolled in four-year college programs actually obtained a bachelor's degree, there would be a very great over-supply of graduates in terms of the percentage that can find jobs requiring their degree.

Mariani (1999) has reported that 15% of those workers without a bachelor's degree in 1998 earned more than the median for workers with a bachelor's degree—\$821 per week. He also reported the median wages of full-time, year-round workers age 25 and older were \$29,744 annually compared with \$42,692 annually for those with at least a bachelor's degree. These data make it clear that, while a four-year college degree isn't a requirement for higher-than-average annual income, it does increase the odds that this will happen.

Despite the odds, ample data exist demonstrating that (a) sizable numbers of four-year college graduates will not be able to find jobs requiring a bachelor's degree, and (b) sizable numbers of jobs exist that do not require a bachelor's degree but pay workers more than the average wage earnings of four-year college graduates. Those who assume that, if a person wants a high-paying job, he/she must have a four-year college degree are obviously wrong. So, too, are those who assume all four-year college graduates can find good jobs if they want them. The old saying "The race is not always to the swift nor the battle to the strong—but that's the way to bet" seems appropriate here and has been adopted by a majority of today's high school students and their parents.

The goal of education as preparation for paid employment is not currently being well met for many four-year college students. This does not mean that enrolling in higher education was a mistake for such students, after all higher education has a number of goals, only one of which is preparation for paid employment. Other higher education goals can also be part of the rationale for enrolling persons in four-year colleges. For example, we can point to those related to helping students appreciate, support, and participate in citizenship efforts, helping students learn how to enjoy—as well as pay for—life and living, and helping students become educated persons. In this sense, the concept of a surplus of four-year college graduates is not truly defensible.

Many community college leaders have emphasized the need to create programs that will make it relatively easy for community college graduates to transfer their credits to a four-year college and then proceed as students in that college to secure a bachelor's degree. This has been of considerable help to many students. The time has come to provide comparable attention to how to help former four-year college students transfer to a community college or some other kind of postsecondary sub-baccalaureate career-oriented educational institution. Two primary groups of students are involved. One group (Group A) consists of the 50% of entering four-year college students each year who are predicted never to receive the bachelor's degree. The other group (Group B) consists of four-year college graduates who later enroll in some postsecondary sub-baccalaureate educational institution.

Group A includes many persons who, after dropping out of a four-year college, seem to be unaware of other means of continuing their education. Instead, some simply seek and secure a minimum-wage job in the secondary labor market. This is a mistake and a great waste of talent. These persons should know about the wide variety of other kinds of postsecondary education that are available to them. They can often find some kind of technical education that

will be intellectually challenging and personally satisfying for them. Urging four-year college dropouts to consider other kinds of postsecondary education should be a high priority of those who counsel such students.

Group B includes many persons whose four-year college bachelor's degree isn't currently needed for jobs in the occupational society. While such degrees can remain very valuable to their holders, they aren't very useful in helping them find jobs. Such persons would do well to consider various kinds of career-oriented programs open to them in other kinds of postsecondary educational institutions.

Based on these present conditions, it seems highly unlikely that the general picture will change very much or very fast. Instead, it seems likely that both parents and high school students will continue to consider the four-year college degree as the best way to ensure success in the occupational society. Even when they recognize that many jobs not requiring a four-year college degree have wages higher than those of the average college graduate, their preference for the four-year college remains strong. The goal of education as preparation for work remains only one among several basic goals of higher education.

Projected Job Needs Requiring Some Form of Postsecondary Sub-Baccalaureate Education

In *America's Choice: High Skills or Low Wages* (National Center on Education and the Economy, 1990) the following recommendation is made: "A comprehensive system of Technical and Professional Certificates and associate's degrees should be created for the majority of our students and adult workers who do not pursue a baccalaureate degree." It is clear this prestigious body is recommending some form of postsecondary education for almost all high school leavers. The occupational society is already moving in this general direction. Between 1994 and 2005 job openings requiring some form of postsecondary sub-baccalaureate education are projected to grow by 34%—faster than any other category of education used by the Bureau of Labor Statistics (OCChart, 1994).

The basic rationale behind this recommendation by the National Center on Education and the Economy (NCEE) is that, as the Information Society moves forward in the direction of replacing many parts of the Industrial Society, America is, more and more, finding itself in a position where it is forced to compete in the international marketplace. Thus, American workers now not only have to compete with each other, but also with workers in other nations who are performing essentially the same tasks. If America is to win in this competition, we must produce workers who work better and produce more products in a shorter period of time than do workers in other nations. In *America's Choice* the NCEE states: "More than 70 percent of the jobs in America will not require a college degree by the year 2000. These jobs are the backbone of our economy, and the productivity of workers in these jobs will make or break our economic future" (p. 3).

It is important to recognize that America already competes well in the international marketplace in terms of four-year college graduates and persons with advanced graduate degrees. It is in the 70% of workers who do not have a four-year college degree where the major problems exist. Other nations have placed a high priority on equipping such persons with high-level specific vocational and technical skills, intellectual knowledge, and the ability to think about and make decisions regarding their job activities. They have done so, in part, by teaming with the occupational society in providing students with a variety of kinds of work experience to go along with their postsecondary classroom studies. As a result they have provided more skilled workers than are typically found in the United States.

Most of the world's advanced occupational societies appear to have invested significant resources in forming partnerships with the education system—far more than can be seen in the United States (NCEE, 1990). With this important help from the occupational society, many highly skilled workers have been produced who are equipped with skills required for success in the Information Age. Such workers are competing well with U.S. workers for available jobs at the present time.

America hasn't yet come close to securing these kinds of help from leaders in the U.S. occupational society. If these kinds of programs are to produce graduates well equipped to compete with their counterparts in other nations, it seems clear that academic instruction in the classroom needs to be fused with work experience in the occupational society. Learning to do and doing to learn are both important. Educational institutions cannot achieve this by themselves. Active partnerships with the occupational society must be created at all levels of education. They are especially needed at the postsecondary sub-baccalaureate level.

Rapid progress is currently being made in terms of replacing secondary school vocational education offerings with opportunities in a variety of kinds of postsecondary sub-baccalaureate level educational institutions. The principal kinds of institutions involved here are (a) community colleges, (b) publicly supported postsecondary vocational-technical institutions, and (c) proprietary career-oriented institutions. The kinds of educational opportunities offered in these institutions ranges from one-day conferences to full two-year concentrated technical education programs. Most of the one-year programs concentrate largely on vocational skills aimed at producing craftspersons in specific occupations. Most of the two-year programs concentrate more on technical skills needed in a wide variety of occupations. There currently exists a great need to clearly separate what could be called occupational education programs from technical education programs. Most occupational education programs aim to produce skilled craftspersons whose primary skills are in doing the job with a strong secondary emphasis on making decisions that require them to think about what they are doing. Most technical education programs place an important emphasis on producing persons qualified to work in positions where their ability to think is at least as important as their ability to do.

Ensuring Excellence in Postsecondary Career-Oriented Education

Major policy decisions must soon be made regarding the need for excellence in various kinds of postsecondary sub-baccalaureate career-oriented educational institutions. Such decisions revolve around whether it will be better to (a) offer essentially the same kinds of career programs in all publicly supported educational institutions or to (b) establish a small number of educational institutions with each concentrating on a different set of career programs. Those who argue for, in effect, duplicating the same major kinds of career programs at each institution emphasize such advantages as:

1. It enables persons to participate in postsecondary education (a) at very low cost (b) without leaving home, or (c) without giving up their current part-time or full-time jobs.
2. It enables postsecondary career institutions and the business/industry community in the local area to collaborate in both enrollment and job placement of students.
3. It enables the educational institution to develop and teach special courses designed to meet needs of local employers.

In addition, those arguing for the "one set of programs for all" approach emphasize that the Department of Education in each State, by approving the curricula to be taught and the qualifications of instructional staff, can help ensure a minimum level of quality that should produce competent workers at a very reasonable cost per student. Under this arrangement, the institution is not responsible for costs associated with housing, food, or recreation.

Those who argue for a small number of postsecondary career institutions, each offering a different set of educational programs open to qualified students statewide argue primarily around the concept of excellence. They emphasize that much of today's technical education requires very expensive machinery that would be almost impossible to provide in a large number of educational institutions in the state. They also argue that it would be very difficult to attract and/or retain the kinds of highly qualified instructors required to provide students with the advanced skills needed in today's occupational society. Further, they argue that, if they are organized so as to attract students statewide (including housing arrangements for such students) they will also be able to place their graduates on at least a statewide if not a national basis.

In addition, they argue that, in every state, provisions are made to supply housing, food, and recreational facilities for students in four-year colleges and universities supported with state funds. If such expenses are to be paid in support of those students who enter public four-year colleges in the state, then they would argue, so should they be available for students in other kinds of publicly supported career-oriented institutions.

They would also argue that, by asking each postsecondary institution to concentrate on a finite number of career programs, each unique to that institution, and then opening up admissions procedures to cover students from all parts of the state, the programs taught at each institution can be of very high quality and

capable of producing graduates who can compete successfully in the international marketplace.

Both of these arguments have obvious merit. It may be that some states will choose to establish and operate some kind of combination program having a large number of institutions designed to operate at the local community level and a much smaller number, each with a different set of programs, operating at the state level.

The Need for General Employability/Adaptability/Promotability Skills

The U.S. K-12 educational system has often been strongly criticized by leaders in the business/labor/industry community for not doing an adequate job in providing students with the kinds of basic skills needed for occupational success. The emerging Information Society has seen these kinds of criticisms increase still further. It is now clear career development efforts for today's youth must start no later than the kindergarten level in the form of partnerships between the education system and the occupational society. The common goals of both educators and members of the business-labor-industry community include:

1. Providing each student with the basic academic skills of reading, communication, mathematics, decision making, and computers
2. Providing students with productive work habits
3. Providing students with a positive set of personal work values

In terms of basic academic skills, a very strong movement now exists to set standards that must be met by all students if they are to make the transition from schooling to employment. The Information Age demands that its successful participants possess these kinds of skills. By emphasizing to students—beginning in the early elementary school years—the importance of acquiring these basic academic skills, it is hoped that they will be better motivated to seek them. Elementary school teachers should be active participants in helping move students toward this goal.

Equipping students with general employability/adaptability skills begins by helping students acquire productive work habits. By picturing the K-12 classroom as a kind of work setting and thus regarding both students and teachers as workers, it is not difficult to help elementary school students acquire such work habits as (a) coming to work (i.e. to school) on time; (b) completing work tasks that are assigned; (c) doing one's best to complete work assignments; (d) following work instructions given by the supervisor (i.e., the teacher); (e) working together with others; (f) learning how to think, and (g) participating in assessment of work performance. Students can and do acquire the kinds of work habits that employers would like all of their employees to possess. If the classroom is regarded as a kind of workplace it is obvious that workers will acquire some kinds of work habits—positive or negative. By emphasizing the importance of positive work habits and encouraging students to use them,

elementary school educators can make important contributions toward equipping students with general employability skills.

Special Efforts in Career Development Needed by Three Segments of the Population

The work people do during their lifetime is a major factor in total lifestyle. For this reason, it is essential that opportunities for help in career development be made available to all persons. Three subgroups have, to date, had major difficulties being provided with non-biased career development efforts. They are (a) women, (b) people of color, and (c) persons with mental and/or physical handicaps.

In discussing challenges for upcoming career development programs, two factors combine to make it essential that the topic of gender equity be included as one of the critical areas to be considered. One of these items can be seen in the very large increase in the number of women graduates who are seeking employment. The second can be seen in the equally obvious increase in the number of families where at least one adult male and one adult female are employed. Both of these things make it apparent that priority policies be established to ensure that women and men be paid in a commensurate way for the work they perform.

Ample evidence exists demonstrating we are far from reaching this point to date. For example, a recent issue of *Occupational Outlook Quarterly* (Summer 1998) provided the following data associated with median weekly earnings of full-time male and female workers with varying amounts of education.

Level of Education	Men	Women
All levels	\$584	\$435
High school grad	\$504	\$361
Some college no degree	\$571	\$411
Associate's degree	\$612	\$473
Bachelor's degree	\$767	\$592

The median weekly wage was reported to grow as the level of education increases for both men and women. In this sense, one could say that gender equity appears to be present. On the other hand, when it is noted that at every level of education weekly median salaries are higher for men than women, the need for gender equity is clear. The difference at every level is more than \$100 per week.

Some will undoubtedly seek to explain and justify these differences by

claiming that men and women choose different kinds of academic studies and so find themselves competing for different kinds of jobs. That argument, too, tends to lose its validity when the following kind of data are considered. These data are found in *Occupational Outlook Quarterly* (Summer 1996).

Academic Major Field of Study	Men	Women
Biology	\$40,675	\$33,107
Business	44,672	33,372
Education	35,216	28,696
Engineering	52,998	46,389
English	39,385	30,483
Psychology	41,986	31,393

It can be seen that, *for every major field of study*, annual earnings of men exceeded annual earnings for women by several thousands of dollars. Since this is a study of differences in male and female salaries where, in effect, the workers had been classmates in college, the sizable differences in median annual wages reported in Table 8.2 cannot be said to result from differences between career goals of men and women.

If America is to compete with other nations in the international marketplace, it will be essential that goals and policies emphasize the importance of every worker doing his/her best. These goals and policies can never be successfully implemented as long as these kinds of differences in earnings between men and women continue.

One journal article published several years ago (Hoyt, 1989). contained evidence that people of color face special career development problems when compared to non-minority persons:

1. The percentage of Black high school graduates enrolling in college declined from 29.2% in 1971 to 26.1% in 1986.
2. The unemployment rate for Black high school graduates ages 18 or 19 was 40.6% but, for Whites, it was 13.8% in 1988.
3. Both Blacks and Hispanics were over-represented in the slow-growing occupations but under-represented in the fastest-growing occupations in 1987.
4. Six out of 10 Black families maintained by young adults under age 25 were comprised of mothers and their young children. Their median income was 42% less than that of White families in similar circumstances.

5. The percentage of Blacks living in poverty was three times as great as the percentage of Whites in 1968 and was almost four times as great in 1987.

While these kinds of data have not been brought up to date for 2000 it seems likely that, if and when this is done, there will not be evidence of great improvement for minority persons. Relativity speaking, more progress seems to have been made in eradication of sex stereotyping than in eradication of race discrimination in spite of the fact that more federal money has been appropriated for activities designed to eliminate race stereotyping.

Changing Role of the School Counselor in Career Development

Today's school counselors are faced with a variety of calls for their involvement in a variety of kinds of activities. They cannot become experts in all of these. Instead, each must agree on which activities are to be called high priority and which are to be labeled as "other." When this is done, one of the high priority activities should be counselor involvement in a variety of activities in the domain of career development. An attempt is made here to specify and describe activities that appear to be most important.

1. *Helping students become more motivated to learn based, in part, on how what they are being asked to learn relates to success in the occupational society.*

In order to carry out this activity, counselors will have to help build partnerships between members of the occupational society and classroom teachers in which currently employed workers share with K-12 students and their teachers ways in which both the academic skills and the general employability skills needed for occupational success are applied in the workplace. Counselors should become key participants in efforts to help teachers form and perform partnership efforts.

2. *Helping both teachers and students perceive the classroom as a kind of workplace.*

The general employability/adaptability/promotability skills employers seek in their workers are no different from the skills that teachers seek to impart to their students. Both seek competence in acquiring basic academic skills, in practicing productive work habits, in learning how to change with change, in learning the societal significance of the work they do, and in making work—paid and unpaid—a meaningful part of their lives.

3. *Helping students and parents become aware of the growing need on the part of most high school leavers to seek some form of career-oriented postsecondary education.*

A high school diploma by itself is no longer sufficient for most persons

seeking to enter the primary labor market. The dead-end nature of most jobs requiring no more than a high school diploma needs to be fully understood. So, too, does the concept that the best way out of the poverty associated with secondary labor market jobs is through some form of postsecondary career-oriented education.

4. *Helping students and parents recognize the existence of many kinds of postsecondary career-oriented institutions in addition to four-year colleges and universities.*

This is particularly important for those who have never been made aware of any other kinds of postsecondary educational opportunities. It is crucial that this information be provided without demeaning or playing down the multiplicity of educational purposes that four-year colleges and universities seek to meet. It is equally important that these comparisons not be made under an assumption that the four-year college is the best with all other alternative kinds of educational institutions being classified as second class. Instead, the goal is to seek the best institution for each person. The best for one person will often not be the best for another. At a minimum, students should learn enough about postsecondary educational opportunities so they can meaningfully discuss (a) four-year colleges and universities, (b) community colleges, (c) private postsecondary one-to two-year career oriented institutions, (d) publicly supported career-oriented institutions offering one-to two-year career skills programs, (e) the armed forces a means of educational opportunity, and (f) Job Corps programs. In addition, the basic concepts associated both with apprenticeship and with other kinds of employer-provided on-the-job education should be shared with students.

5. *Helping students and parents recognize the multiple goals of four-year colleges and universities.*

Education as preparation for work is only one of a number of priority goals held by most four-year colleges and universities. To visit with students and/or their parents about higher education only in terms of projected economic returns to graduates is both unfair and untrue. It is unfair to the extent that it narrows the breadth of understanding on the part of future college students regarding why they have chosen to attend a four-year college as opposed to some other type of postsecondary education. It is untrue because there are many occupations whose median wages are considerably higher than those paid four-year college graduates (Cosca, 1994-95). Those persons who compare the four-year college with other kinds of postsecondary education only in the sense of economic returns will sometimes find that another kind of postsecondary education appears to be superior. Those who compare all postsecondary education in terms of all of the goals and objectives

of higher education will usually find four-year colleges and universities to be the best choice.

6. *Helping students discover and develop positive work values.*

Increasingly, workers—both youth and adults—can expect to change occupations more than once during their adult working years. When, in a given employing organization, a particular occupation is abolished, those employees who emphasize only occupational values are likely to be confused about what to do. On the other hand, those who think about their jobs in terms of work values will have a better chance of finding a new occupation with work values related to their old occupation. Stability of career will depend more on understanding and dealing with work values than with occupational values.

This does not mean, of course, that occupational values should no longer be considered in career planning. On the contrary, it appears that more up-to-date and better occupational information is very likely to be available through computerized data banks.

7. *Forming partnerships with the private sector.*

There is no doubt that America's ability to compete in the occupational society of the international marketplace will be highly dependent on developing and implementing a variety of partnerships between the private sector and the educational system. Such partnerships already exist in most of the world's leading nations which are competing with the United States in the international marketplace. It is essential that both the quantity and the quality of such partnerships be greatly increased in the United States of America. At the local community level, school counselors are among those who may logically be expected to engage in partnership efforts with the private sector.

8. *Creating and operating a program of part-time jobs for students.*

This is another activity which, although it could be carried out by a variety of kinds of educators at the local community level, is in many communities most logically carried out under the leadership of school counselors. Such programs help students acquire and develop both good work habits and personally meaningful work values in addition to providing the income of a part-time job.

9. *Participating in service-learning programs.*

Increasingly, K-12 school districts are developing and implementing programs of what has come to be called service learning. Service learning helps persons volunteer their efforts in helpful activities under arrangements where they receive their primary benefits through knowing they are being helpful to others—not in being paid money. Service-

learning programs hold great potential of being developed and operated in ways that help persons acquire and develop their own work values. School counselors, although not typically directors of service learning, certainly have much to gain by participating in it.

All of these activities represent opportunities for today's school counselors to participate actively in career development activities in K-12 school districts. Obviously, with the large numbers of student problems calling for activity on the part of school counselors, only a portion of the counselor's time can appropriately be spent on the nine major types of career development activities discussed here. To advocate counselor involvement in these career development activities is in no way intended to downplay or criticize other important roles being played by today's school counselors. Rather, it is simply to plea for inclusion of these roles in the career development phase of school counselors' professional activities.

Concluding Remarks

The emergence of the Information Age has already forced major changes in the career development arena. It seems evident that, as the years go by, these changes will become both more numerous and more impressive. The old days of "choosing my occupation" no longer exists even now for most persons. Neither do the old belief that a high school education is adequate for entry into most fields, the old notion that the term "postsecondary education" means the same as "four-year college education," and the notion that men should be the primary wage earners in most households.

These kinds of changes have created a new set of challenges for the career development movement—one that ties career development specialists to both the education system and the occupational society. The increasingly close relationships between education and work make it imperative that the career development movement accept these challenges for change and go about meeting them.

Appendix A
Tables 3.1–3.16

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Table 3.1
Gender of CHS Students (In percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Male	49	54	55	45	53	42
B. Female	51	47	45	55	48	58

Source: Item 1—Gender

Table 3.2
Marital Status of CHS Students (In percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Single	65	64	72	63	86	26
B. Married	27	27	22	29	12	55
C. Divorced	8	8	7	8	2	18
D. Widowed	<1	<1	1	<1	<1	1

Source: Item 2—Marital Status

Table 3.3
Racial Background of CHS Students - (In percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. American Indian or Alaskan Native	3	4	3	3	3	3
B. Asian or Pacific Islander	2	2	2	2	2	2
C. Black/African American	9	12	8	8	8	10
D. Caucasian/White	76	72	79	79	76	77
E. Multiracial	2	2	2	1	2	2
F. Other	4	5	7	4	5	3
G. Race unknown	1	1	1	<1	1	<1
H. Prefer not to respond	3	3	5	3	3	3

Source: Item 6—Race

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Hispanic/Latino	92	93	89	94	92	94
B. Mex./Mex.-Amer./Chicano	4	3	7	4	5	3
C. Puerto Rican	1	1	1	<1	1	1
D. Cuban, Cuban American	1	<1	<1	<1	1	<1
E. Other Hispanic/Latino	2	3	2	1	1	2

Source: Item 5. Are you of Hispanic/Latino ethnicity?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Full-time	83	83	92	81	87	78
B. Part-time	16	16	8	19	13	22

Source: Item 7. What is your current enrollment status?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. In same town	27	30	21	27	27	27
B. Less than 25 miles	22	23	21	23	25	18
C. 25-100 miles	27	27	27	28	31	21
D. 101-200 miles	6	6	6	6	7	5
E. More than 200 miles	17	15	25	16	11	28

Source: Item 18. How far is this institution from the town in which you last attended high school?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Less than 1,000	9	10	6	9	10	7
B. 1,000-5,000	21	21	20	22	24	17
C. 5,001-20,000	22	21	23	22	22	22
D. 20,001-50,000	16	14	16	16	15	18
E. 50,001-100,000	12	12	12	11	10	14
F. More than 100,000	20	21	24	18	18	23

Source: Item 17. What was the population of the town in which you last attended high school?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. 8th grade or less	<1	1	<1	<1	<1	1
B. Some HS, no diploma	4	9	2	1	5	2
C. High school diploma	51	46	55	52	62	30
D. GED	8	10	9	7	5	12
E. Occup. training after HS	3	3	3	2	1	5
F. Some college, no degree	23	22	22	25	21	29
G. Voc./tech. degree or cert.	5	5	4	5	3	9
H. Associate's (2-year degree)	4	3	3	5	2	7
I. Bachelor's (4-year degree)	3	2	3	4	1	7

Source: Item 9. What was the highest level of education you had completed?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Did not graduate	4	9	3	3	4	5
B. GED	9	12	10	8	6	14
C. Top quarter	25	20	22	28	25	25
D. Second quarter	36	35	38	37	39	32
E. Third quarter	21	20	22	20	22	18
F. Bottom quarter	5	5	5	5	4	5

Source: Item 12. Where did you rank in your high school class?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. College Prep	29	23	29	33	32	24
B. Business Ed	7	7	10	7	7	8
C. Vo-Tech	13	16	12	11	14	10
D. Tech Prep	3	3	3	3	3	2
E. Youth Apprentice	1	1	1	1	1	1
F. General	43	45	41	43	40	50
G. Other	2	3	3	2	2	3
H. No high school	1	2	1	1	1	2

Source: Item 13. How would you describe your high school program of study?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. College Prep	31	18	19	41	29	36
B. Business Ed	15	13	22	13	15	14
C. Vo-Tech	29	42	33	21	31	25
D. Tech Prep	9	10	11	8	8	11
E. Youth Apprentice	2	3	2	2	2	3
F. General	12	12	11	12	13	9
G. Other	3	3	3	2	3	3

Source: Item 19. Which one of these high school programs do you recommend for a high school student?

Table 3.12
CHS Students Who Judge Selected High School Courses to Be
“Very Important” Or “Important” to Doing Well at the
Postsecondary Level (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
20. English/Language Arts	90	87	88	91	89	91
21. Math/(Algebra & Above)	80	81	79	82	81	82
22. Math/(General/Voc.)	92	93	92	91	91	93
23. Science (Physical/Bio.)	66	63	60	71	68	68
24. Social Science (Geog./Hist.)	45	42	40	49	45	46
25. Foreign Language	32	29	29	35	33	30
26. Keyboarding, Word Proc.	70	64	74	72	73	66
27. Accounting	43	41	48	41	44	41
28. Computer Programming	55	52	62	54	57	50
29. Ind. Arts/Trades & Industry	40	44	46	36	42	35
30. Vocational Agriculture	21	23	19	21	23	16
31. Career Educ./Exploration	51	51	53	51	51	49
32. Home Econ./Life Educ.	37	45	35	37	38	35
33. Marketing/Dist. Educ.	33	32	36	33	35	31
34. Fine Arts	25	24	26	26	26	24
35. Business Education	53	52	60	52	54	51

Table 3.13
Items in CHS Student Survey Where Sizable Differences Are
Found Between Responses Given by Students Under Age 25 and
Students Age 25 and Over (In Percent)

Item and/or Foil	Students Under Age 25	Students Age 25 and Older
Male	53	42
Female	48	58
Single	86	26
Married	12	55
Spouse divorced/deceased	3	18
Full-time students	87	78
Hometown more than 100 miles away	18	28
High School: highest level of Education	62	30
Some college	21	29
2nd 1/4 Rank in high school class	39	32
General Program taken in high school	40	50
College Prep recommended	29	36
Vo-Tech recommended	31	25
Keyboarding course recommended	73	63
Computer Program course	57	50

Table 3.14
Nineteen Items Where Sizable Differences Are Found Between
Responses Given by Students Under Age 25 and
Students Age 25 and Over

Item Topic	Mode Under Age 25	Mode 25 and Older
1. Gender—Male	53%	42%
2. Marital Status	Single	Married
17. Population of hometown	1,000 - 5,000	5,000 - 20,000
23. Science (physical/biological)	Important	Very important
24. Social sciences (geography/history)	Important	Not important
28. Computer programming	Important	Very important
42. Time studying per week outside class	1-3 hours	4-10 hours
44. Personal safety on campus	Safe	Very Safe
58. Expected salary upon graduating (per week)	\$200-\$300	\$300-\$400
61. Considered this type of education in HS	Yes	No
70. Took vocational tests while in high school	Yes	No
88. Inst. repres. helped seek financial aid	No	Yes
92. Where are you now living?	Parents, home	Home I own
95. Weekly personal expenses	Less than \$50	\$50-\$100
104. Number hours now employed (per week)	10-20	31-40
105. Current earnings (per week)	\$100-\$200	Less than \$100
108. No. of jobs held before enrolling here	None	4 or more
111. Earnings on last job prior to enrolling (per week)	\$100-\$200	\$200-\$300

Table 3.15
Support for Students in Fields with Predominantly Opposite
Gender (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Never thought about it	45	43	43	47	46	44
B. Strong support	24	27	26	23	24	26
C. Adequate support	24	23	23	24	24	23
D. Minimal support	4	5	5	5	5	4
E./F. No support/resistance	2	2	3	1	2	3

Source: Item 43. How much support do you feel there is at this institution for a male or female student in a field where most students are of the opposite gender?

Appendix B
Tables 4.1–4.11

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Table 4.1
Source of Information About Institution (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. High school teacher	6	7	5	6	8	2
B. High school counselor	7	8	5	8	10	2
C. Newspaper or mag. advert.	5	5	10	4	4	8
D. Info. mailed by the inst.	9	6	9	11	8	12
E. TV or radio	6	3	19	3	5	6
F. Friends	31	34	22	31	31	31
G. Repres. of the institution	6	6	11	5	7	4
H. Veterans Admin. repres.	1	1	1	1	1	2
I. Parent/guardian	10	10	6	11	13	4
J. Other	19	20	14	20	14	27

Source: Item 65. How did you first learn about this institution?

Table 4.2
Strongest Influence to Attend Current Institution (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Parent/guardian	20	19	20	21	28	7
B. Middle/junior HS counselor	1	1	1	1	1	<1
C. High school counselor	2	3	1	2	3	<1
D. Middle/junior HS teacher	<1	1	<1	<1	1	<1
E. High school teacher	2	2	2	1	2	<1
F. Relative	6	7	7	6	5	8
G. Friend	10	11	9	9	9	11
H. Previous employer	1	2	1	1	1	2
I. Repres. from this inst.	2	2	4	2	2	3
J. Other	4	5	4	4	3	7
K. I made the decision alone	51	49	52	52	46	60

Source: Item 68. Which one individual most strongly encouraged you to attend this institution?

Table 4.3
Accuracy of Information Received from Institutional Representatives Prior to Enrollment (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. I did not have such a visit	33	32	9	42	33	35
B. All of the information was accurate	32	37	38	29	32	33
C. Most of the information was accurate	25	24	36	22	25	24
D. About half was accurate and half was not accurate	7	6	12	6	7	6
E. Most of the information was not accurate	2	2	3	1	2	1
F. Almost none of the information was accurate	1	1	2	1	1	1

Source: Item 37. If you visited with a representative of this institution before enrolling, how accurate was the information you received?

GTI

Table 4.4
Reactions to Admission Information Prior to Enrollment (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. I did not have an admissions interview prior to enrolling	32	27	8	41	49	32
B. Things were very well explained	36	44	51	30	36	38
C. Things were somewhat well explained	26	25	36	24	27	25
D. Things were poorly explained	4	4	4	4	4	4
E. Things were very poorly explained	1	1	1	1	1	1

Source: Item 38. How would you describe the information provided during your admissions interview prior to enrolling at this institution?

Table 4.5						
Students Visiting the Institution before Enrolling (In Percent)						
Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	67	69	82	61	68	63
B. No	33	31	18	39	2	37

Source: Item 66. Did you visit this institution before enrolling?

Table 4.6						
Most Important Factor in Decision to Enroll in Institution (In Percent)						
Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Close to where I was living	26	18	14	33	27	25
B. Offered courses at conv. times	8	9	12	7	7	9
C. Able to get student loan here	3	3	6	7	3	3
D. Friend(s) recommended to me	5	6	5	4	5	4
E. Person in VocRehab recommended	2	4	2	2	1	4
F. Offered kinds of courses I wanted	31	35	39	26	31	31
G. Costs low enough-could afford	15	14	6	18	15	14
H. Other	10	11	16	8	11	1

Source: Item 69. What one factor was most important in your decision to enroll in this institution?

Table 4.7
Time when Postsecondary Career Choices Reportedly Made by
CHS Students (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Grades K-6	5	5	3	5	6	3
B. Grades 7-9	7	8	8	7	9	3
C. Grades 10-12	27	27	30	27	38	7
D. After high school	61	60	59	61	47	87

Source: Item 60. When did you decide to pursue the occupation for which you are now training?

Table 4.8
Students Seriously Considering This Type of Institution While
Still in High School (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	40	36	35	43	51	21
B. No	50	53	55	47	41	67
C. Other	10	10	9	10	8	12

Source: Item 61. Did you seriously consider going to this type of institution while still in high school?

Table 4.9
Students Deciding to Attend This Institution While in High School
(In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	29	25	26	31	42	5
B. No	68	71	71	65	55	92
C. Other	3	4	3	4	3	3

Source: Item 67. Did you make the final decision to attend this institution while you were still in high school?

Table 4.10
Presence of Guidance Counselor in Your High School (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	93	91	94	93	96	87
B. No	4	4	3	4	2	7
C. Other	3	4	3	3	2	6

Source: Item 14. Was there a guidance counselor in the high school you attended?

**Table 4.11
Help Provided by High School Counselor (In Percent)**

Resources	Career Post-Secondary		Private Career College		Public Community College		Under Age 25	Age 25 or Older
	All Students	School	College	College	College	25	25	
A. My counselor and I talked, but did not discuss attendance at this type of institution	14	15	17	13	16	12		
B. I was generally encouraged to attend this kind of institution	15	14	11	16	19	6		
C. I was informed about this kind of institution but neither encouraged nor discouraged from attending	15	14	13	15	18	8		
D. I was generally discouraged from attending this kind of institution	2	3	3	2	3	2		
E. I was informed about this kind of institution but encouraged to attend some other type of institution *	2	3	3	2	3	2		
F. There was not a counselor at my high school	2	3	2	2	1	5		
G. I did not discuss with the counselor any plans for after high school	27	26	29	28	25	33		
H. Don't remember/don't know	18	19	18	18	13	28		
I. Other	5	3	4	4	2	4		

Source: Item 64. If there was a guidance counselor in your high school, what did she/he tell you about enrolling in institutions like this one?

Appendix C
Tables 5.1–5.20

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Table 5.1
Opinions Regarding Safety on the Campus (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very safe	47	46	48	47	45	49
B. Safe	49	50	48	50	50	48
C. Unsafe	3	3	3	2	3	2
D. Very unsafe	1	1	1	1	1	1

Source: Item 44. How would you judge your personal safety on the campus of this institution?

Table 5.2
Degree of New Learning (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. All new	18	21	18	17	16	21
B. Most new	53	52	52	54	53	55
C. Half new	24	23	25	24	25	21
D/E. Little/none new	4	4	5	4	5	3

Source: Item 40. How much of what you are learning here is, for you, new information?

Resources	All Students	Career Secondary School	Post-Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. I had no learning expectations	6	5	5	6	6	5
B. Learn. everything expected	47	50	47	47	47	48
C. Learn. most of what expected	39	35	40	40	38	40
D. Learn. little of what expected	6	7	8	5	6	6
E/F. Not learn much/any of what expected	3	3	3	2	2	2

Source: Item 39. Do you feel you are learning what you expected to learn in this program?

Resources	All Students	Career Secondary School	Post-Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Less than 6 months	4	5	5	3	4	5
B. 6-12 months	22	36	32	13	23	21
C. 13-18 months	19	24	24	13	22	15
D. 19-24 months	39	28	21	49	39	38
E. More than 24 months	16	7	8	22	13	20

Source: Item 46. How long does it take a full-time student to complete this program?

**Table 5.5
Work Requirement Compared to High School (In Percent)**

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Work here is much more difficult	26	22	20	30	23	32
B. Work here is somewhat more difficult	41	36	40	43	41	41
C. Work here is about the same	21	24	24	18	22	18
D. Work here is somewhat less difficult	8	12	10	6	10	6
E. Work here is much less difficult	4	6	5	3	4	3

Source: Item 41. Compared to the work required of you in high school, how would you describe the work required of you here?

Table 5.6						
Time Spent Studying Outside of Class (In Percent)						
Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. None	10	18	11	6	13	5
B. 1-3 hours	35	38	41	32	40	26
C. 4-10 hours	36	28	35	40	34	39
D. 11-19 hours	12	10	10	14	9	18
E. 20 or more hours	7	6	3	8	4	12

Source: Item 42. On the average, how much time do you spend per week studying outside of class time?

Table 5.7						
Chances of Completing Educational Program (In Percent)						
Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Excellent	69	67	76	68	69	71
B. Good	24	25	20	25	25	23
C. Fair	4	5	3	4	4	4
D. Poor	1	1	1	1	1	1
F. Don't know	1	2	1	1	1	1

Source: Item 45. What do you think are your chances of completing the program?

**Table 5.8
How Students Found Living Arrangements (In Percent)**

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. I was living where I now live before I started at this institution	70	74	65	70	65	79
B. Person(s) who work at this institution helped find a place to live	6	3	13	5	8	2
C. Other student(s) at this institution helped me find a place to live	2	2	3	2	3	1
D. A friend(s) who lived in this town helped me find a place to live	3	3	3	3	4	2
E. I found my own living arrangements	19	17	16	21	20	17

Source: Item 93. How did you find a place to live when you came to this institution?

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Table 5.9
Current Living Arrangements (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. In the home of my parent(s)/guardian(s)	36	37	37	35	50	11
B. In the home of relative(s) other than my parent/guardian	5	6	5	4	5	3
C. In the home I own	20	21	13	22	29	46
D. In a house, apartment, etc.	31	31	35	30	29	35
E. In a rented room in a private home	2	2	2	2	2	2
F. In a hotel or motel	<1	<1	<1	<1	<1	<1
G. In housing owned & operated by this institution	3	1	5	4	5	<1
H. Other	2	2	2	2	2	3

Source: Item 92. Where are you now living?

Table 5.10
Distance From Living Quarters to Institution (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. less than 10 miles	42	41	42	42	44	39
B. 10-25 miles	33	34	32	33	3	36
C. 26-50 miles	19	19	19	19	19	20
D. 51-75 miles	4	4	5	4	4	
E. more than 75 miles	2	2	3	2	2	1

Source: Item 94. How close to this institution is the place where you now live?

Table 5.11
Student Employment Information (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	63	56	62	65	67	55
B. No	37	44	38	35	33	45

Source: Item 103. I am now employed in a full-time or part-time job.

Table 5.12
Average Hours Worked per Week (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Less than 10 hours	18	22	18	17	17	22
B. 10-20 hours	26	24	23	27	29	19
C. 21-30 hours	23	23	24	23	27	16
D. 31-40 hours	21	19	23	20	19	24
E. more than 40 hours	12	11	13	12	8	19

Source: Item 104. On the average, how many hours a week are you employed?

Table 5.13
Source of Current Job While a Student (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Someone employed by this institution	19	19	20	15	19	18
B. Someone attending this institution	9	9	9	8	10	7
C. I found this job by myself	43	39	43	45	44	42
D. Friends not attending this institution	8	8	7	8	8	7
E. My parent(s)/guardian(s)	4	4	4	4	5	2
F. Other	17	20	16	16	14	25

Source: Item 107. If you obtained your present job after beginning your program here, which one of the following best describes how you did that?

Table 5.14
Sources Used by CHS Students to Finance Education (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
72. Federally insured student loan	29	22	61	23	29	26
73. Scholarship(s) from this institution	9	6	11	10	11	6
74. Scholarship(s) from source other than this institution	9	8	8	9	10	7
75. Personal savings	27	28	18	30	29	24
76. Spouse's wages	11	11	6	12	6	18
77. Parent(s)/guardian(s) (family resources)	26	23	27	28	37	7
78. Job Training Partnership	10	15	7	8	7	14
79. Department of Vocational Rehabilitation	5	7	4	4	4	6
80. Veterans Administration	6	6	6	5	4	8
81. Bureau of Indian Affairs	3	3	2	2	2	2
82. Pell Grant	31	29	33	32	30	35
83. Personal Wages/Social Security	26	25	19	28	26	25
84. ADC/AFDC	5	7	5	4	5	5
85. Social Security	3	4	3	2	3	2
86. Other	7	9	7	6	6	8

Source: Items 72-86. To what extent are you relying on the Sources listed below to finance your education at this institution?

Table 5.15
Discussion with Institutional Personnel About
Beginning Income Students Could Expect After Completion of
Program (In Percent)

Resources	All Students	Career Secondary School	Post-Career College	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	34	37	49	28	36	29	
B. No	66	63	51	72	64	71	

Source: Item 59. Prior to enrolling in your course of study, did the institutional personnel discuss the level (range) of beginning income you could expect after completion of the program?

Table 5.16
Comparison of Help Provided by the Institution in Gaining
Financial Aid (In Percent)

Resources	All Students	Career Secondary School	Post-Career College	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	41	39	72	33	40	42	
B. No	41	40	18	48	42	39	
C. N/A	18	21	10	20	18	19	

Source: Item 88. Did a representative from this institution help you in seeking financial aid to attend this institution?

Table 5.17
Help Received from High School Counselor in
Seeking for Financial Aid (In Percent)

Resources	All Students	Career Secondary School	Post-Career College	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	14	13	10	16	20	3	
B. No	61	61	70	59	59	66	
C. N/A	25	26	20	25	21	31	

Source: Item 87. Did your high school counselor help you in looking for financial aid to attend this institution?

Table 5.18
Expected Cost to Complete the Educational Program
(In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Less than \$2,500	24	43	9	19	24	23
B. \$2,501-\$3,500	20	20	5	24	20	19
C. \$3,501-\$4,500	13	11	4	17	14	13
D. \$4,501-\$5,500	10	8	6	13	10	11
E. \$5,501-\$6,500	8	7	8	9	8	9
F. \$6,501-\$7,500	6	5	10	6	6	7
G. \$7,501 or more	8	7	57	12	18	17

Source: Item 89. How much do you expect the total cost will be for you to complete this program?

Table 5.19
Effect on Enrollment Choices of Knowing Cost in Advance
(In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Had accurate info. about costs	44	46	50	42	44	46
B. Yes, I definitely would have	29	29	19	32	29	29
C. Yes, I probably would have	17	16	16	17	17	15
D. I may have, I may not have	7	7	10	6	7	7
E. No, probably would not have	2	2	4	2	2	2
F. No, definitely would not have	1	1	2	1	1	1

Source: Item 91. If you had known before enrolling here that it would cost as much as it does, would you have enrolled anyway?

Table 5.20
Comparison of Obtaining Funds for Educational Program (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. No trouble	53	57	58	50	52	56
B. A little trouble	36	34	33	39	38	34
C. A lot of trouble	10	10	9	11	10	10

Source: Item 90. How much trouble are you having obtaining funds needed for completing your program?

Appendix D
Tables 6.1–6.13

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Table 6.1
Opinion of This Institution You Would Give to a Friend in
High School (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Outstanding	29	31	28	28	26	33
B. Good	57	55	54	60	59	55
C. Fair	11	11	14	11	12	10
D. Poor	3	3	4	2	3	

Source: Item 47. How would you rate this institution if a good friend, still in high school, asked you for your frank and honest opinion?

Table 6.2
Chances of Getting a Job in the Field in Which You Trained upon
Completion of Program (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Excellent	43	46	44	42	43	45
B. Good	42	40	42	43	42	40
C. Fair	11	10	10	11	11	10
D. Poor	1	2	1	1	1	1
E. Very poor	1	1	1	<1	1	<1
F. I don't know	2	2	3	3	2	

Source: Item 57. When you complete your program, what do you feel are your chances of getting a job in the field for which you are now training?

Table 6.3
Comparison of Expected and Actual Salaries for Career Oriented
Postsecondary Students (In Percent)

Weekly Salary	Expected Salary (All Students)	Obtained Salary (All respondents)
\$200 or less	10	19
\$201-\$300	24	31
\$301-\$400	24	23
\$400-\$599	23	19
\$600 or more	6	4

Sources: Item 58 . About how much money, before any deductions, do you expect to earn per week on your first job after completing the program in which you are now enrolled? (CHS Student Survey)

Item 9. When you started on your first job after leaving the postsecondary institution, what were your weekly wages (before taxes and deductions)? (CHS Employment Survey)

Table 6.4 (a - g)
Difficulty of Solving Problems after Deciding to Attend
Institution (In Percent)

Table 6.4a: Finding Affordable Housing

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very easy	17	17	19	17	20	12
B. Somewhat easy	14	12	14	13	15	9
C. Somewhat difficult	8	9	8	8	9	7
D. Very difficult	5	5	5	5	6	5
E. Not applicable	56	56	54	57	50	67

Table 6.4b: Find Quality Housing

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very easy	15	15	16	14	17	11
B. Somewhat easy	13	13	13	13	15	9
C. Somewhat difficult	9	9	9	9	10	7
D. Very difficult	6	6	6	6	7	5
E. Not applicable	57	57	56	57	51	68

Table 6.4c: Finding Part-Time Employment

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very easy	18	17	18	19	22	11
B. Somewhat easy	16	15	16	17	19	11
C. Somewhat difficult	12	12	13	11	13	9
D. Very difficult	8	9	9	7	9	7
E. Not applicable	46	47	44	46	37	62

Table 6.4d: Finding Full-Time Employment

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very easy	10	11	10	10	11	8
B. Somewhat easy	9	9	9	9	9	7
C. Somewhat difficult	7	8	7	7	8	6
D. Very difficult	9	10	10	9	10	8
E. Not applicable	65	64	64	66	62	71

Table 6.4e: Making Transportation Arrangements

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very easy	40	39	41	40	45	31
B. Somewhat easy	17	18	18	17	18	15
C. Somewhat difficult	9	10	10	8	9	9
D. Very difficult	4	4	5	3	4	3
E. Not applicable	30	29	27	32	23	42

Table 6.4f: Finding Quality Child Care

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very easy	8	10	8	8	7	11
B. Somewhat easy	7	7	5	7	6	8
C. Somewhat difficult	5	6	4	5	4	7
D. Very difficult	4	5	4	4	3	6
E. Not applicable	76	72	80	77	80	68

Table 6.4g: Finding Affordable Child Care

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very easy	8	9	8	7	7	9
B. Somewhat easy	6	6	4	6	5	7
C. Somewhat difficult	5	6	4	5	4	7
D. Very difficult	5	6	5	5	4	8
E. Not applicable	77	73	80	77	81	69

- Sources:* 6.4a. How difficult is it to find housing I could afford?
 6.4b. How difficult is it to find housing I liked?
 6.4c. How difficult is it to find part-time employment?
 6.4d. How difficult is it to find full-time employment?
 6.4e. How difficult is it to make transportation arrangements?
 6.4f. How difficult is it to find quality child care?
 6.4g. How difficult is it to find affordable child care?

**Table 6.5
 Students' Confidence in Making Judgements About
 Their Instructors (In Percent)**

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very well qualified	31	34	29	30	30	32
B. Well qualified	37	34	38	39	38	36
C. Qualified	28	27	30	28	28	28
D. Poorly qualified	3	4	3	3	3	3
E. Very poorly qualified	1	1	1	<1	1	1

Source: Item 48. How well qualified do you feel to make judgments about the instructors in your program?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. All know me well	25	31	21	24	26	24
B. Most know me well	33	30	33	34	33	31
C. Some know me well	26	23	29	27	26	27
D. Few know me well	10	10	11	10	9	11
E. None know me well	6	7	6	5	5	6

Source: Item 49. How would you judge the degree to which the instructors in your program know you?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very high	37	41	32	36	36	39
B. High	44	39	46	46	44	43
C. Average	17	17	19	17	18	16
D. Low	2	3	2	2	2	2
E. Very low	1	1	1	<1	1	<1

Source: Item 50. How would you rate the quality of the instructors in your program?

Table 6.8
Ease of Getting Help from Instructors in Program (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. There is always help when I need it	54	53	57	53	53	54
B. There is usually help when I need it	32	29	30	34	32	32
C. Sometimes there is help when I need & sometimes there isn't	12	15	11	12	12	12
D. There is usually not help when I need it	2	2	1	1	2	1
E. There is never help when I need it	1	1	<1	<1	1	<1

Source: Item 51. How easy is it to get help from instructors in your program when you need it?

Table 6.9
Students' Comfort Level in Asking Questions in the Classroom (In Percent)

Resources	All Students	Career Post- Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. I always feel comfortable asking questions	55	58	58	52	52	60
B. I usually feel comfortable asking questions	35	33	34	37	37	33
C. I seldom feel comfortable asking questions	8	7	7	9	9	6
D. I never feel comfortable asking questions	2	2	2	2	2	1

Source: Item 52. How do you feel about asking questions in the classroom when you need clarification or additional information?

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Table 6.10
Students' Confidence in Making Judgements About Equipment
in the Program (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very well qualified	24	26	24	23	24	23
B. Well qualified	37	37	38	38	39	35
C. Qualified	33	32	32	34	32	35
D. Poorly qualified	5	5	5	5	5	6
E. Very poorly qualified	1	1	1	<1	1	<1

Source: Item 53. How well qualified do you feel to make judgments about the equipment in your program?

**Table 6.11
Condition of Equipment in Your Program of Study (In Percent)**

Resources	All Students		Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
	All Students						
A. All is in good working condition	35	33	33	36	36	33	33
B. Most is in good working condition	50	49	49	51	49	52	52
C. Approximately half is in good working condition	11	12	13	10	11	11	11
D. Less than half is in good working condition	3	4	3	2	3	3	3
E. Almost none is in good working condition	1	2	1	1	1	1	1

Source: Item 54. How would you judge the condition of the equipment you use in your program of study?

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Table 6.12
Judgments Regarding the Variety of Equipment in Program
(In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very good	30	30	29	30	31	29
B. Good	44	42	44	45	44	44
C. Average	21	21	22	21	20	21
D. Poor	4	5	4	3	4	4
E. Very poor	1	1	1	1	1	1

Source: Item 55. How would you judge the variety of equipment available in your program?

Table 6.13
Modernity of Equipment in Program's Work Area (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very modern	22	22	22	22	23	20
B. Modern	60	56	61	62	60	60
C. Somewhat outdated	16	19	15	15	15	17
D. Very outdated	3	4	3	2	3	3

Source: Item 56. How modern is the equipment in your program's work area?

Appendix E
Tables 7.1–7.17

**Table 7.1
Percentage of Educational Program Completed by CHS Students**

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Less than 1/4 of the program	1	1	1	1	1	1
B. More than 1/4 but less than 1/2	2	2	1	2	2	1
C. More than 1/2 but less than 3/4	3	2	2	4	3	2
D. More than 3/4 but less than entire program	7	6	5	8	7	6
E. All of the educational training program	87	90	91	86	87	91

Source: Item 1. How much of the educational program at the postsecondary institution you attended did you complete?

Table 7.2
Kind of Postsecondary Degree/Certificate CHS
Students Received (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Associate's degree	53	18	54	67	49	48
B. Professional certification	8	15	6	6	7	8
C. Technical certificate or diploma	26	55	31	15	31	36
D. Certification of attendance	1	2	1	1	1	1
E. Other	2	3	2	2	2	2
F. Did not receive a degree/certificate	10	7	7	11	10	6

Source: Item 2. What kind of degree/certificate did you receive from the postsecondary institution?

Table 7.3 a-e
Student Ratings of the Quality of the Institution Attended (In Percent)

Table 7.3a: Quality of Program Content

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. High	60	60	48	64	55	54
B. Medium	37	37	45	35	43	43
C. Low	3	4	6	2	3	3

Table 7.3b: Quality of Instructors

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. High	60	63	53	60	55	53
B. Medium	35	30	41	35	41	42
C. Low	5	6	7	5	5	5

Table 7.3c: Use of Technology

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. High	43	46	40	44	46	36
B. Medium	47	45	48	46	45	54
C. Low	10	10	12	10	10	10

Table 7.3d: Quality of Job Placement Assistance

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. High	28	31	39	26	28	21
B. Medium	35	34	32	36	40	43
C. Low	37	35	29	39	32	36

Table 7.3e: Quality of Equipment

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. High	33	34	31	34	33	26
B. Medium	52	51	52	53	48	47
C. Low	15	15	17	14	20	27

Table 7.4
CHS Students Who Would Go to the Same Postsecondary
Institution and Take the Same Program Again
(In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	72	77	58	75	66	67
B. No	28	23	42	25	34	33

Source: Item 4. If you had the opportunity to start again, would you go to the same postsecondary institution and take the same program?

Table 7.5
How CHS Students Learned About the First Job Obtained After Leaving
the Postsecondary Institution Attended (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
<i>Item 5</i>						
A. Institution personnel (instructors/counselors/ placement office staff)	23	23	35	19	21	18
B. Friends or relatives	22	22	19	23	21	16
C. Newspaper or magazine advertisement	13	13	13	13	12	11
D. An employment agency	4	4	5	4	4	4
E. Previous employer	6	6	3	6	5	6
F. Nobody helped me. I found this job by myself	24	23	19	25	20	21
G. Other	8	8	5	10	6	9
<i>Item 6</i>						
A. School Personnel arranged interview	22	23	17	37	23	20

Source: Item 5. I learned about the first job I obtained after leaving the postsecondary institution from _____.

Item 6. Did personnel at this institution make arrangements for you to have an interview with an employer when you were applying for your first job after leaving this institution?

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Table 7.6
Percentage of First Jobs Obtained by CHS Students That Are
Related to the Educational Program Attended (In Percent)

Resources	All Students	Career Post- Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes, it is exactly the kind of work for which I was prepared	57	61	48	60	56	62
B. Yes, it is somewhat related to my area of preparation	28	27	36	25	29	24
C. No	15	12	16	15	15	14

Source: Item 7. In your opinion, is the first job you obtained after leaving the postsecondary institution related to your educational program?

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Table 7.7
Weekly Wages of CHS Students at First Job After Leaving
Postsecondary Institution (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. \$200 or less per wk.	19	18	23	17	20	14
B. \$201-\$300 per wk.	31	33	38	29	33	26
C. \$301-\$400 per wk.	23	27	22	22	23	22
D. \$401-\$599 per wk.	19	15	13	22	16	25
E. \$600 or more per wk.	5	4	3	6	4	8
F. Does not apply	4	3	2	4	3	4

Source: Item 9. When you started on your first job after leaving the postsecondary institution, what were your weekly wages (before taxes and deductions)?

Table 7.8
Degree to Which Learned Skills Improved Job Performance
(In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes, a lot of help	57	61	47	59	54	63
B. Yes, some help	30	28	38	28	32	24
C. No, not much help	6	5	8	6	7	6
D. Does not apply	7	7	8	7	8	7

Source: Item 10. Do (or did) the skills you learned in the educational program help you to do better work on your first job?

Table 7.9
Likelihood of Obtaining First Job Without Training Gained at Institution (In Percent)

Resources	All Students	Career Post- Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes, I'm quite sure I would have been hired	17	14	18	17	18	14
B. I probably would have been hired	18	16	21	17	20	13
C. No, I probably would not have been hired	24	25	32	22	25	21
D. No, I'm sure I would not have been hired	36	39	25	39	32	46
E. Does not apply	6	6	5	6	5	7

Source: Item 11. Could you have obtained your first job after leaving the educational institution if you had not obtained this training?

Table 7.10
Satisfaction of CHS Students with Their First Job
(In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Very satisfied	32	35	29	33	32	35
B. Satisfied	42	40	40	42	42	40
C. Slightly dissatisfied	14	13	17	13	14	13
D. Very dissatisfied	8	8	10	7	7	8
E. Does not apply	5	4	4	5	5	5

Source: Item 12. How satisfied are (or were) you with your first job after completing your educational program?

Table 7.11
Comparison of First Jobs for CHS Students after Leaving
Educational Programs with the Kinds of Jobs They Thought they
Might Obtain (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Better than I thought	19	19	15	17	16	18
B. About like I thought	58	58	53	59	59	56
C. It is worse than I thought	14	14	23	15	16	16
D. Does not apply	9	9	9	9	9	10

Source: Item 13. How does (or did) your first job after leaving the educational program compare with the kind of job you thought you might be able to get?

Table 7.12 a-c
Comparison of Current & Previous Jobs by CHS Students (In Percent)

Table 7.12a: Current Job Better Than Last Job?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Overall job satisfaction	68	68	68	68	68	66
B. Enjoyment	65	66	65	65	64	66
C. Well suited for the job	61	62	60	61	62	59
D. Weekly pay	72	69	68	73	74	65
E. Chances for advancement	62	60	61	62	64	58
F. Chances of keeping job	60	60	57	59	60	56

Table 7.12b: Current Job About Same as Last Job?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Overall job satisfaction	28	26	26	27	27	27
B. Enjoyment	30	29	30	30	31	28
C. Well suited for the job	36	35	36	37	35	37
D. Weekly pay	18	18	20	17	18	18
E. Chances for advancement	28	29	29	28	27	30
F. Chances of keeping job	37	36	38	37	36	40

Table 7.12c: Current Job Worse Than Last Job?

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Overall job satisfaction	6	6	5	5	5	7
B. Enjoyment	5	5	6	5	5	6
C. Well suited for the job	3	4	4	3	3	4
D. Weekly pay	11	13	12	10	8	16
E. Chances for advancement	11	11	11	10	9	13
F. Chances of keeping job	4	4	5	4	4	5

Table 7.13
Average Hours CHS Students Work at Their
Current or Primary Job Per Week
(In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Currently not employed	3	4	4	3	3	4
B. Less than 10 hours per wk.	1	1	1	1	1	1
C. 10–20 hours per wk.	4	4	3	5	4	4
D. 21–30 hours per wk.	8	9	7	8	8	9
E. 31–40 hours per wk.	47	46	48	46	46	47
F. Over 40 hrs. per wk.	37	37	38	37	38	34

Source: Item 15. On average, about how many hours a week do you work in your current job (or your primary job, if you hold more than one)?

Table 7.14
Benefits Provided by Current Employers of CHS Students
(In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Health insurance	61	70	64	73	57	54
B. Disability insurance	35	40	37	43	32	35
C. Retirement benefits	43	48	43	54	40	41
D. Life insurance	44	49	43	45	39	42
E. Dental Insurance	43	50	44	52	39	41
F. Day care facilities	5	7	3	7	4	5

Source: Item 16. Which of the following benefits are provided by your current employer? (Mark all that apply.)

Table 7.15
CHS Students Presently Employed in a Non-traditional Job for Their Gender (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	9	8	7	9	8	10
B. No	79	78	77	81	79	81
C. I don't know	12	14	16	10	13	9

Source: Item 17. To your knowledge, are you presently employed in a non-traditional job for your gender?

Table 7.16
Employers Needing to Make Satisfactory Accommodations for CHS Students with Disabilities (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	2	3	2	2	2	2
B. No	12	14	10	11	10	13
C. Not applicable	86	84	89	87	88	85

Source: Item 18. If you have a disability, was it necessary for your employer to make accommodations

Table 7.17
Satisfaction With Accommodations made by Employers Students (In Percent)

Resources	All Students	Career Post-Secondary School	Private Career College	Public Community College	Under Age 25	Age 25 or Older
A. Yes	3	4	2	3	3	3
B. No	<1	1	1	1	<1	1
C. Uncertain	1	1	1	1	1	1
D. Not applicable	96	94	96	96	96	96

Source: Item 19. If you answered "Yes" to question 18, are/were the accommodations satisfactory?

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