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ABSTRACT
                The study reports the results of a survey of 2,292
13-year olds and 2,173 17-year olds, in Connecticut, using a
criterion-referenced assessment instrument designed to test 15
content domains (job satisfaction; occupational levels, fields, and
emphasis; occupational trends; occupational levels and education;
leisure time; job specialization/satisfaction; self awareness; life
experiences and career choice; school subject areas; abilities and
interests; steps in career planning; satisfaction from work; training
programs; activities related to careers; and relationship among
occupational level, academic ability, and interests). Detailed
tabulation and discussion of results is presented in three sections:
(1) highlights, including a discussion of the implications of the
results; (2) base line, including comparisons between various groups
within the population and an examination of the data for causes of
high or low scores, with a view to the future use of these results as
base-line data; and (3) content domain analysis, presenting,
comparing, and discussing the responses in each area. Appended
materials include: the Connecticut Guidance Objectives; definitions
of terms used; the measurable objectives used in the development of
the criterion-referenced test items; the assessment instruments,
together with instructions and selected correspondence; and basic
test response data. (SA)

CONNECTICUT

CAREER GUIDANCE

ASSESSMENT

Connecticut State Board of Education

ISIS

INSTITUTE FOR THE STUDY OF INQUIRING SYSTEMS

ISIS

CONNECTICUT CAREER GUIDANCE
ASSESSMENT
1974

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Submitted to:

BUREAU OF PUPIL PERSONNEL AND SPECIAL EDUCATION SERVICES
CONNECTICUT STATE DEPARTMENT OF EDUCATION
HARTFORD, CONNECTICUT

December, 1974

This report, based on fifteen objectives in the career guidance
domain, is phase IV of a project initiated in 1970 to bring
state level planning and services in the area of school coun-
seling and guidance to a new level of accountability founded on
a needs analysis strategy.

The first activity undertaken in the project was a sampling of
the concerned populations related to school counseling and
guidance services, i.e., counselors, students, administrators,
parents, and teachers, to determine the scope of
activities which counseling services were delivering, or for
which there was expectation that they would be delivered.
Twenty school systems representing large cities, large suburbs,
small suburbs, and rural areas were invited to participate.
Teams of professionals in the area of guidance and pupil
services conducted individual and group meetings which were
taped, summarized, and reported to the department.

In 1971-72 goal statements and objectives were formulated
which reflected the variety of activities and concerns
identified in the phase I study. That study contained four
domains of concern as a basis of the work of school counselors
with students: educational, career, social and leisure.

As a next step, in 1972-73, priority was given and a contract
awarded to develop an assessment in the area of career guidance.
Fifteen objectives which lent themselves to a paper and pencil
instrumentation were selected. Each guidance goal in the
career domain was represented by one or more objectives. This
required slight rewording of some objectives, as stated in the
document Connecticut Guidance Objectives, but the essential
intent of the objectives was retained. By March, 1974 two
instruments had been developed by two nationally recognized
guidance consultants with experience in career guidance and
assessment: Clarence D. Johnson, Department of Pupil Personnel,
California State University at Fullerton and Dr. Anita M. Mitchell,
Director of Pupil Services, Culver City, California. Each item
was pilot tested on a population of 13 year olds and 17 year olds
containing a significant sampling of minority students. Those
items were selected which clustered about the 50% response level
so that significant variations would have statistical interpre-
tability. As a result two instruments were completed.

The completed instruments provided Connecticut with a career
guidance needs assessment capability for 13 year olds and 17 year
olds. These ages were the target populations of other national
assessment efforts, and included two of the three age groups
used previously in the Connecticut Reading Assessment. These
instruments have now been used as the basic tool for gathering
the data which is reported in this study.

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APPENDICES

I. INTRODUCTION

BACKGROUND

As part of a continuing program to evaluate the adequacy of educational programs in the public schools, in 1973, the Bureau of Pupil Personnel and Special Education Services of the State Department of Education established a priority for the assessment of career guidance practices in Connecticut's junior and senior high schools. The data to be derived from such an assessment would be important for bureau and departmental planning and would be shared with local school systems for curriculum development, guidance programming, in-service training, and for policy and management decisions.

Accordingly, two contracts were let; the first in 1973, for the development of suitable instruments, was awarded to the team of C. D. Johnson and Anita M. Mitchell; the second, in 1974, for administration, analysis, and report of the assessment, was to the Institute for the Study of Inquiring Systems (ISIS).

The specific purpose of the assessment was to be to determine the response of a sample of students of a given age to test items developed to measure the attainment of very specific guidance goals and objectives. From the results, accurate predictions about the capabilities of all students in the age group to perform likewise can be made. Furthermore, comparison of the data can be made by sex, by communities with similar characteristics, and across other demographic dimensions concerning career planning and experience.

This assessment program was financed through various provisions of the Federal Elementary and Secondary Education Act, and was directed and monitored by the Bureau of Pupil Personnel and Special Educational Services.

INSTITUTE FOR THE STUDY OF INQUIRING SYSTEMS

The Institute for the Study of Inquiring Systems (ISIS) was chartered in 1967 as a non-profit, tax-exempt organization, specializing in performing educational research for all levels of government. ISIS has worked with the Massachusetts Department of Education, the Pennsylvania Department of Public Instruction, various school districts,

a consortium of Pennsylvania, New York, New Jersey, and Delaware, the National Institute of Education and the Office of Education of the Department of Health, Education and Welfare. In 1972, ISIS conducted Connecticut's first educational needs study--an assessment of the reading skills of nine, thirteen, and seventeen year olds; and a prioritization study of Connecticut's educational goals.

Throughout the development and administration of the Career Guidance Assessment, ISIS worked closely with responsible staff members of the Connecticut State Department of Education to assure that the assessment adequately reflected Connecticut's career guidance and educational objectives and practices.

Any inquiries concerning the methodology or analysis used in this assessment should be addressed to Michael H. Halbert, Executive Director of the Institute.

II INSTRUMENT DEVELOPMENT

The basic instruments, and the objectives they were designed to measure, were developed prior to ISIS involvement in the assessment program. The following descriptions of objective and test development are taken almost verbatim, from "Connecticut Career Guidance Assessment - Developmental Manual" prepared by C. D. Johnson and Anita Mitchell for use by the Connecticut State Department of Education.

OBJECTIVE AND TEST DEVELOPMENT

Connecticut Career Guidance Objectives

The Connecticut Department of Education adapted goals and objectives modified from the Vocational Domain published in CPGA Monograph Service, Number 4, Accountability in Pupil Personnel Services: A Process Guide for the Development of Objectives, California Personnel and Guidance Association, 1971. Each objective selected was reviewed against survey data collected earlier in sampled schools to determine expectations for guidance services. This sample represented large suburbs, small suburbs, and rural areas. The objectives also represented modification of the Vocational Domain of the N.S.G. (National Study of Guidance) taxonomy. It was next necessary to develop assessment instruments for thirteen (13) year olds and for seventeen (17) year olds which would measure attainment of these objectives.

Examination of the objectives (Appendix A) revealed that they covered three functional levels: perceptualization (awareness), conceptualization (accommodation - internalization), and generalization (action). Most of the generalization objectives concerned action specific to the individual student - action which could not be verified by a paper and pencil test but would have to be validated by school personnel. Some of the perceptualization and conceptualization objectives were stated in such a way that the behavior change intended was neither measurable nor observable. With the consent of representatives of the Connecticut State Department of Education, some objectives were restated to make them measurable; a few of the action objectives, although retained as State objectives, were not addressed, as they were not subject to paper and pencil instrumentation.

Statement of Posture

At the request of the Connecticut Department of Education, assessment instruments were planned which would measure attainment of the objectives selected and modified by Connecticut from the National Study of Guidance Taxonomy of Guidance Objectives. Consistency with, and coverage of, areas contained in the career and occupational development objectives of the National Assessment of Educational Progress were also to be achieved.

Procedures used in the development of the NAEP instruments were studied and adapted for development of the Connecticut instruments. These procedures included selection of theoretical model(s); definition of terms; development of item forms; development of directions for item constructors; specification of criteria for selection of item constructors; selection of item constructors; decisions concerning the dimensions of the item bank; utilization of the Delphi technique to establish content validity; specification of criteria for selec- tion of members of the Delphi team; selection of Delphi team members; refinement of items; field testing; response tally and analysis; item selection; further refinement of items selected; field testing in Connecticut; further refinement of items; test construction.

Besides refe ence to the NSG taxonomy and the NAEP program, an exhaustive review was conducted of the literature concerning criteria referenced and domain referenced testing, particularly in the area of career development. The rigorous nature of the pursuit of selected procedures required extension of time lines, but the necessary delays were more than offset by the products of this approach.

Domain-referenced approach

The establishment of standards of achievement is very complex. Criterion referenced test items which address the specific task(s) embedded in an objective are most appropriate in an assessment program such as that envisioned by Connecticut. If the items are rigorously constructed, mastery of the objective can be inferred from successful response to the corresponding item(s).

For the purposes of this assessment program, "domains" were established that went beyond individual criterion referenced items; a domain is a total population or universe of test items, with parameters so specifically defined as to clearly identify whether or not an item belongs to that particular universe. It is not necessary to generate the universe of items, but it is necessary to conceptualize that universe in order to establish the parameters. Only a sampling of actual items need be produced. To insure that each item in the instrument was directly referenced to and representative of a specific criterion inherent in each objective and to describe the domain, an item form was developed for each objective. The item form included the objective: the task(s) embedded in the objective (which was to be sampled in the item(s)'; a general description of the form the task would take; specific item characteristics; necessary disclaimers, directions or cautions to be included in instructions to students; a cell matrix defining the components which must be included in each item (specifics within each component to be inter- changeable); and a replacement scheme, including the age level or levels for which items were to be constructed. (See Appendix C).

These item forms, submitted to the State Department for approval, served as devices for quality and consistency control in the development of the items. Rigorous validation of each item in terms of each component of the item form was conducted after the items were constructed.

A series of items was constructed for each objective. Because the items are criterion referenced, they are sensitive to instruction; given adequate instruction, all students should be able to respond correctly to each of tl 1 items. Therefore, the tests are measures of the effectiveness of program, rather than measures of individual students.

Definitions of Terms

In the review of the literature as well as in the study of the NSG Taxonomy and the NAEP program, it became evident that choices would need to be made (such as which job classification system to use) and definitions would need to be stated and agreed upon. For this task, the assistance of several consultants was sought and after considerable research and cross validation, followed by discussion with State Department representatives, definitions were completed and approved. The reader is urged to study the definitions, pre- sented in Appendix B, to establish an accurate frame of reference in relation to the assessment items.

Item Construction

The construction of test items was completed by preparing instructions, selecting item constructors, assigning objectives, and by monitoring the processes to completion. The instructions (Appendix B) were precisely defined including necessary definitions and tasks. Each objective was addressed individually (Appendix C) delineating the task to be completed and the parameters of each item.

Criteria for item constructors included: (1) previous test construc- tion experience; (2) proven knowledge in career guidance program development; (3) actual experience working at the school building level as a career guidance worker; and (4) knowledge of criterion referenced assessment. From a list of known professionals who qualified on all four criteria, the following item constructors were chosen: Donal F. Averill, Director of Career Education, Huntington Beach Union High School District; William Blankenship, Westminster High School, Westminster, California; Dr. Betty Ellis, Los Angeles City Schools; Emery Fillmore, Westminster High School, Westminster, California; Dr. Thomas Jacobsen, Grossmont Union High School District;

Dr. Barbara Lasser, Southwest Regional Laboratory; Dr. Stanley Ostrow, Santa Clara County Department of Education; Dr. Lester Ristow, Los Angeles County Department of Education. Each was contacted by phone and mailed the directions, definitions and item forms with assigned objectives. Monitoring was done by personal and/or phone contact to the point of completion.

When all items were collected and analyzed against the appropriate item forms, refinement was necessary. Some changes were simple, such as modifying directions and/or changing wording to that appro-priate to thirteen (13) and seventeen (17) year old students. However, a few items had to be replaced when it was agreed they did not follow the item form and therefore did not address the task to be assessed.

Delphi Technique

In keeping with procedures utilized in the NAEP study and others, the Delphi technique was employed to establish content validity. Criteria used for selection of members of the Delphi team are: (1) actively engaged in some aspect of career education and/or career guidance; (2) nationally recognized as an educational leader in career development; (3) authority established by creditable publications; (4) representative of various geographic areas; and (5) representative of various educational levels and agencies. The following were selected:

Dr. Robert W. Stoughton, Consultant
Connecticut Department of Education (retired)

Dr. Roger Kaufman
Professor, United States International University

Dr. Norman Gysbers
Professor, University of Missouri

Dr. Thomas Smith
Director, Research and Pupil Personnel
Covina Valley Unified School District, California

Dr. Stuart Mandell
Director of Research and Development
East Whittier School District, California

Dr. H. B. Gelatt
Consultant, College Entrance Examination Board

Dr. Richard Johnson
Associate Professor, Florida State University

After an item pool of 280 items had been generated by the test constructors, each item was rigorously checked against the item form. Items which deviated from the item form were discarded. Items which met the requirements of the item form but required editing for language difficulty, clarity of instructions, and format, were modified. More than 160 items survived this step of the procedure. These items were sent to each member of the Delphi team, together with item forms, definitions, and instructions for the task of determining content and construct validity.

Delphi team members provided detailed comments about each item. All recommendations and suggestions were utilized by a team of consultants who assisted in analyzing each item. Some items were deleted, others were refined or rewritten. Items were again reviewed to insure that the item form was followed, the directions were clear, and that the language level was appropriate to the specified age level.

When agreement was attained, items were formatted for assessment purposes. Items were divided into ten (10) sets, making five (5) instruments for testing at the thirteen (13) year old level and five (5) for the seventeen (17) year old level. The ten (10) instrument format allowed for field testing of all items with large enough population samples to make final item selection.

Field Testing

The field test was designed and implemented to obtain data according to established guidelines for final item selection. The population criteria for both thirteen (13) and seventeen (17) year olds were: (1) ethnically mixed; (2) wide range of reading abilities; (3) half had participated in a career guidance program; and (4) representatives from different socio-economic populations.

Population

Items for each age level (13 and 17) were divided into five (5) forms, a total of ten (10) forms. Each form was field tested on two (2) class groups. The 'A' forms on thirteen (13) year old eighth graders and the 'B' forms on seventeen (17) year old twelfth graders. Total field test population was 560; 348 eighth graders and 212 twelfth graders. Ethnic distribution was as follows:

	13 year olds	17 year olds
Blacks	23	14
Spanish surname	55	31
American Indian	6	1
Oriental	32	12
Anglo	232	154

Socioeconomic distribution:

	13 year olds	17 year olds
Lower	92	29
Middle	205	170
Upper	51	13

Each of the ten (10) forms was given to one class that had been
exposed to a career guidance unic and one that had not.

Pupil characteristics were supplied by the teachers who administered
the test. Judgment regarding socioeconomic status was based on
knowledge of the neighborhood in which the student lived, and on
information about his parent(s) occupation.

Schools were selected and students were selected to insure that
all criteria were satisfied. Counselors were chosen to administer
the actual tests. They were asked to furnish population data on
the range of ability levels representing each ethnic group, the
time in which the majority of students finished, the items students
had difficulty with, and comments and recommendations from students
and teachers.

All tests were returned, scored, and tallied, and all items were
analyzed to determine degree of difficulty, effectiveness of
distractors, importance of task, reasonableness of task, and
validation of correct response.

Comments from teachers furnished excellent information, but comments
from students were invaluable. Each comment was carefully considered,
and final item selection was greatly influenced by student and teacher
reactions as well as by analysis of responses to test items.

Item Selection

Analysis of scoring, tallying, and comments of teachers and students
in the field test led to the rejection of some items, and to the
selection of those items which proved to be most effective for each
objective.

Scoring and tallying were completed by professional clerks. Analysis of scores and tallies was a joint effort of the authors and selected consultants.

The first task was to identify items with the closest approximation to 50% success level, and in which the distractors were working. If there was not a spread of responses to the distractors, the item was discarded. Items which met selection criteria survived the first round, but final selection of items was made only after all surviving items for each objective were analyzed and compared. No formal item discrimination study was necessary, as the approximation process provided adequate information for item selection.

Item Refinement

With final item selection completed, the assessment instruments for junior high school students (Form A) and for senior high school students (Form B) were formatted. Reading levels, directions, and item clarity were reviewed again by the authors and selected consultants. Some changes were recommended and completed. The final version was forwarded to the Connecticut State Department of Education for a local field test.

Connecticut Field Test

The field test of both forms by Connecticut State Department personnel with selected students, provided information for the final item refinement. Each recommendation received was considered and appropriate changes were made. Final formatting was completed and the instruments were submitted to the Connecticut State Department of Education.

INSTRUMENT REVISION AND REDESIGN

ISIS was brought under contract in April, 1974 to conduct the assessment using the Johnson and Mitchell instruments. After examining the instruments, it was felt there was still considerable work to be done to ready them for production and administration. Despite the extensive and detailed work already done by Johnson and Mitchell and their distinguished consultants, much work was necessary to bring individual items into conformance with established Connecticut norms in Vocational-Technical Education, apprentice programs, and Career Guidance practices. The revision effort was carried out jointly by Department of Education and ISIS staff and consisted of changes in instructions, extensive revision of format, isolated changes of answer foils, and the inclusion of demographic questions which would serve as additional bases of comparison among student groups.

The revised instruments were finally approved by the State Department of Education, but were not again field-tested, since they were still essentially the same excellent instruments developed by Johnson and Mitchell.

As finally constructed, the instruments tested a total of fifteen content domains. Table 2.2.1 shows the number, full name, and "short name" of these content domains, the objective on which each content domain was based, and the number of items used to test each objective for both age levels; the total also shows the number of common items used in each content domain.

The entire text booklets, including an introduction and instructions to the student are included in Appendix D.

In addition to the introduction included in the booklet, each administrator was furnished with a script to be read to the students before administering the instrument. The script is also included in Appendix D.

TABLE 2.2.1   11

DEFINITION OF CONTENT DOMAINS*

No.	Description	Short Name**	No. of Items At Each Age		No. of Common Items
			13	17	
114	Job Satisfaction	Job Satisfaction	5	7	0
115	Occupational Levels, Occupational Fields, Work Emphasis	Levels, Fields Emphasis	5	5	1
116	Occupational Trends	Occupational Trends	5	6	0
117	Occupational Levels and Education	Levels and Education	6	6	6
118	Occupations Affect the Amount of Leisure Time	Leisure Time	5	7	5
119	Job Specialization Affects Job Satisfaction	Specialization/ Satisfaction	5	5	5
211	Awareness of Self Characteristics Help to Make Wise Career Choices	Self Awareness	5	5	0
212	Relationship Between Life Experiences and Career Choices	Life Experiences	6	6	0
213	Relationships Between School Subject Areas and Occupations in Preparing An Educational Plan	School Subject Areas	4	5	0
221	Identifying Career Alternatives That are Consistent with Abilities and Interests	Abilities and Interests	5	4	1
222	Steps in Career Planning	Steps in Planning	7	9	0
224	Satisfaction Derived from Work	Satisfaction from Work	12	5	4
311	Training Programs for Occupations	Training Programs	10	10	10
312	Activities Related to Careers	Related Activites	7	7	2
321	Relationship Among Occupational Level, Measured Verbal Ability, Math Ability, and Interests	Level/Abilities/ Interests	5	5	5

*These names are used throughout the tables in this report to identify Content Domains.

**Readers are urged to see Table   which contains all of the test items which constitute each of the Content Domains.

III. SAMPLE DESIGN

APPROACH

The assessment process was based on selecting a sample of students and presenting each with a series of test exercises to assess his or her specific career planning and decision making skills. The use of a probability sample follows accepted procedures in government, business, industry, science, and most recently, education. If a sample drawn from a given universe is large enough and random, it can be assumed to be representative (within defined limits) of the total universe from which it was drawn.

The students selected for the assessment were a random sample of 13 and 17 year olds attending Connecticut public schools and the State Vocational-Technical Schools. Based on previous practices in Connecticut, it was decided to conduct three administrations of nominally twelve students each, at each school in the sample. Since it was necessary to sample a minimum of 2,000 students at each age to assure small standard errors in the resulting data (in keeping with previous Connecticut and NAEP practices) this decreed a total of 56 schools to be sampled at each age. School quotas were assigned to SOC (see next section) proportional to school population. Within each SOC, at each age, schools were selected by taking a systematic random sample, where the probability of a school being selected was proportional to its estimated number of pupils at the appropriate age level. To allow for absenteeism and to provide a margin of safety, each administration was nominally to fifteen students (i.e., fifteen students were designated in the sample to be tested). Accordingly, each school in the sample was to provide a nominal quota of 45 students. The table below shows the nominal respondent quota by SOC and age as a result of the sample definition.

RESPONDENT QUOTA BY SOC CATEGORY

Age	Big	Fringe	Medium	Small	Total
13	540	585	675	720	2520
17	450	675	675	720	2520
Total	990	1260	1350	1440	5040

DEFINITIONS

Size of Community (SOC)

Big Cities (1) - All towns with a population greater than 100,000.

Fringe Cities (2) - Towns whose borders are contiguous with Big Cities and whose population is greater than 10,000.

Medium Cities (3) - Towns with population greater than 25,000 which are not Big Cities or Fringe Cities.

Smaller Places (4) - All other towns.

These definitions are the same as those used in the Connecticut Reading Assessment. They are based on definitions used by National Assessment, but reflect Connecticut geography and population. Had we used National Assessment definitions for these categories, there would have been no Big Cities or Fringe Cities in Connecticut, and cities classified as Medium would have accounted for 87% of the total state population.

Age - age was defined as follows:

Age	Born Between
13	6/1/60 - 5/31/61
17	6/1/56 - 5/31/57

Eligible - At each age level, eligible students were those in the nominal grade for that age, as well as one grade ahead or behind. It was not our intention to sample either the very bright or those with learning disabilities. Since the ability to take the intended tests was tied directly to reading ability, students in special reading classes were not considered eligible.

STUDENT SELECTION PROCEDURES

At each selected school the names of all eligible students were
listed from school records. Given the number of actual eligible
students at a school, our computer was programmed to randomly deter-
mine up to 45 primary sample points, and up to 45 each of first,
second, third and fourth back-up sample points. The computer output
was strips with the symbols YES, 1, 2, 3, 4, or -- spaced on the
strips to match the spacing on the Student Listing Forms. When
these strips were overlayed (cut and pasted) on the Student Listing
Forms, each student's name had a single symbol next to it, indicating
uniquely whether that student was to be in the primary sample (YES)
or to be used only as a first, second, third or fourth (1, 2, 3, 4)
backup. Students with a "-" next to their name were not to be used.

PROBABILITY CALCULATIONS

Let N_i = Number of eligibles of one age (e.g., 13 yrs.) in the ith stratum.

N_{ij} = Number of eligibles of one age in the jth school in the ith stratum.

The quota of schools for the ith stratum (Q_i) is

$$Q_i = 56(N_i / \sum_i N_i)$$

This led to quotas of 12, 13, 15, and 16 schools for Large, Fringe, Medium, and Small Strata, respectively for 13 year olds.

To determine the probability of a school being chosen A_{ij} was defined as the number of 13 year old eligibles in the jth school in the ith stratum.

Then the probability of the jth school being chosen, for the 13 year old sample, is

$$P_j = A_{ij} / \sum_j A_{ij}$$

The probability of any given 13 year old in that school being chosen, given that his school is chosen, is

$$P_c = 45/A_{ij}$$

These probabilities can now be combined into a single statement for the child:

$$P_c = (N_i / \sum_i N_i)(56)(A_{ij} / \sum_j A_{ij})(45/A_{ij})$$

Since $\sum_j A_{ij} = N_i$ and $\sum_i N_i = T$ (the total number of 13 year olds in Connecticut schools in grades 6, 7, 8 -- about 56,578), this expression can be reduced to

$$P_c = 56 \cdot 45/N = 0.045$$

This is the probability of a random 13 year old eligible being
selected for the sample. In actual practice, the number of 13
year olds in any school is unknown, but it was estimated from
1970 age/grade data.

All of the variables in the probability equations are estimates,
except A_{ij} which was actually counted from the school records.
A correction factor is therefore introduced as a weight at the
individual school level. Instead of a weight of 1.00, an adjustment
for the difference between actual values and estimates was used.
This weighting method is described and illustrated in Section V;
its effect is to derive unbiased estimates of the true scores by
accounting for the effect introduced by having slightly different
probabilities for different children because the actual number of
eligibles was not exactly the same as the estimated number.

DESCRIPTION OF FINAL SAMPLE

After all the data were collected and analyzed, the final composition
of the sample was as shown in Tables 3.5.1 and 3.5.2.

SOC 1 consists of all five of Connecticut's large cities and therefore
constitutes a 100% sample of that stratum. The strata were not all
of equal size, in terms of number of schools or number of students.
The samples of strata (SOC's) reflect these size differences, and
are not equal, but are in proportion to the size of their strata.

The data of Tables 3.5.1 and 3.5.2 is broken down within SOC by
various other demographic data solicited from the students through
the test instruments. The instruments are shown complete, including
the demographic questionnaires in Appendix D.

TABLE 3.5.1

FINAL SAMPLE COMPOSITION
(in percent)

13 year olds

| Demographic Variables | Size of Community | | | | Total |
	Big City	Fringe City	Medium City	Smaller Place	
Total Respondents (No.)	(409)	(555)	(641)	(687)	(2292)
Sex					
Female	49.4	50.8	49.5	52.1	50.6 (1159)
Male	50.4	48.7	49.9	47.9	49.1 (1125)
No Answer	0.2	0.5	0.6	0.0	0.3 (8)
Career Guidance/Education Program					
Yes	29.3	21.1	27.3	14.8	22.4 (514)
No	67.7	77.3	70.8	83.7	75.7 (1735)
No Answer	2.9	1.6	1.9	1.5	1.9 (43)
Guidance Counselor Discussions					
Yes	32.5	25.9	28.7	22.3	26.8 (614)
No	49.4	66.1	61.0	68.3	62.8 (1429)
Don't Remember	15.2	6.5	8.9	8.2	9.2 (211)
No Answer	2.9	1.4	1.4	1.3	1.7 (38)
Planning Voc-Tech School					
Yes	23.0	7.9	13.1	10.6	12.9 (295)
No	40.8	55.5	49.1	52.4	50.2 (1150)
Undecided	32.8	35.1	29.3	35.1	33.1 (758)
No Answer	3.4	1.4	8.4	1.9	3.9 (89)
Job Decision					
Yes	66.7	59.5	62.7	62.3	62.5 (1433)
No	30.1	38.7	35.3	36.0	35.4 (811)
No Answer	3.2	1.8	2.0	1.7	2.1 (48)

TABLE 3.5.2

FINAL SAMPLE COMPOSITION
(in percent)
17 year olds

	Size of Community				
Demographic Variables	Big City	Fringe City	Medium City	Smaller Place	Total
Total Respondents (No.)	(452)	(479)	(605)	(637)	(2173)
Sex					
Female	50.0	51.1	49.1	55.6	51.6 (1122)
Male	49.8	48.9	50.6	44.0	48.1 (1045
No Answer	0.2	0.0	0.3	0.5	0.3 (6)
Career Guidance/Education Program					
Yes	27.2	29.2	32.1	26.1	28.7 (623)
No	72.1	70.4	67.6	73.2	70.8 (1538)
No Answer	0.7	0.4	0.3	0.8	0.6 (12)
Guidance Counselor Discussions					
Yes	65.5	72.2	56.5	65.9	64.6 (1404)
No	25.0	23.2	37.0	27.5	28.7 (623)
Don't Remember	9.3	4.4	6.3	6.1	6.4 (140)
No Answer	0.2	0.2	0.2	0.5	0.3 (6)
Work Experience					
Regular Job	38.5	46.8	49.3	44.7	45.1 (981)
Summer Job	41.8	31.7	34.7	35.3	35.7 (776)
Not Worked	13.3	12.5	11.1	15.1	13.0 (283)
Work Study	4.4	7.5	3.8	3.5	4.6 (101)
No Answer	2.0	1.5	1.2	1.4	1.5 (32)
Job Decision					
Yes	67.9	63.0	63.0	65.3	64.7 (1406)
No	31.4	36.3	36.5	34.2	34.7 (755)
No Answer	0.7	0.6	0.5	0.5	0.6 (12)

IV. ADMINISTRATION

RECRUITING AND TRAINING OF ADMINISTRATORS

Selection of Administrators and Supervisor - The procedures used for
recruiting and training were essentially the same as those used success-
fully in the Reading Assessment of 1972. Indeed we were even able to
employ several of the same people as administrators. Our selection
criteria for administrators were as follow:

- teaching experience
- availability without other commitment for the required time
- dependable personal transportation
- ability to work effectively with school administrators

We again looked for substitute teachers as our primary source of poten-
tial administrators. Once the school sample was drawn, ten administra-
tion areas were defined with approximately equal numbers of schools
in each area. Superintendents were contacted in each area to supply
the names of substitute teachers who might be interested. These people
were contacted by phone, and a list of prospective administrators for
personal interview was compiled. As a result of the interviews, ten
administrators and a supervisor were hired. In addition, we selected
one substitute administrator to be trained in all procedures, to serve
as a back-up if necessary.

Training of Administrators - The training program for administrators
was divided into two sessions coinciding with the two phases of
assessment operations:

- Training Session I was held on May 7, 1974, and included
  a general overview of the program as well as specific
  training in the tasks to be performed in Phase I: planning
  session with school officials, preparation of Student
  Listing Forms, scheduling, selection of testing facility, etc.

- Training Session II was held on May 20, 1974, and consisted
  of detailed training in the administration procedures to be
  used in Phase II: use of the Student Listing Forms to draw
  the student sample, instructions to students, test administra-
  tion, preparation of transfer forms.

- A final de-briefing session was held on June 10, 1974, at which
  all materials were returned, and feed-back and criticism soli-
  cited from all administrators.

All sessions were held in Meriden, Connecticut and conducted by ISIS staff.
Officials of the Department of Education were invited to all sessions.

SOLICITATION OF SCHOOL COOPERATION

To insure maximum cooperation from the schools chosen for the assessment, several means of communication with school personnel were employed. Prior to the administrator's first visit, a letter was sent to all Superintendents of schools selected for the sample. In this letter, the assessment program was explained and Superintendents were told that one or more schools in their district was included in the sample. Enclosures with the letter included: (see Appendix D).

1) a letter from Maurice Ross requesting cooperation on behalf of the State Board;

2) a copy of the operational memo which was later sent to school principals; and

3) the names of the schools in the Superintendent's district which had been selected for the sample.

Following this mailing to Superintendents, a similar mailing was sent to the principals of the schools to be included in the sample, including a letter explaining the program and soliciting their cooperation, in addition to all materials previously sent to the Superintendents. Detailed explanations and instructions regarding the assessment process were also sent to the school principals. (See Appendix D.)

The second contact with the school officials took place when the ISIS Connecticut Field Supervisor telephoned the principal of each of the schools to be included in the program. The primary purpose of this call was to schedule appointments between the administrators and principals to discuss the details of the assessment procedure for each school. A secondary purpose of the supervisor's call was to verify the principal's knowledge of and cooperation with the assessment program, thereby laying the groundwork for the administrator's initial visit. This telephone communication with principals proved to be an extremely valuable step in the assessment procedure enabling many potential problems and conflicts to be avoided early.

Cooperation offered school principals was in most instances extremely gratifying a few school officials found it difficult for their schools rate in the program, the majority were enthusiastic about included in the program and were eager to be of assistance.

SCHEDULING

The assignment of administrators to schools was done primarily on the basis of geographic proximity so as to reduce excessive traveling time to and from the schools.

While the initial appointments were scheduled by their Supervisor, administrators were responsible for the scheduling of the actual school assessments. Guidelines for this scheduling were given by ISIS during Phase I of the training program.

The schedule of dates and times for all assessments were compiled by ISIS into a Master Assessment Schedule and administrators were responsible for apprising their supervisor of any changes made.

ADMINISTRATION OF ASSESSMENT

Phase I: Initial School Visits - During this first phase of the assessment program, the administrators visited each of their assigned schools and discussed the details of the assessment program with the principal of the school and/or a member of his staff whom he may have assigned as a program coordinator. At this meeting the following tasks were discussed and completed:

A. Description of Assessment Program

All principals had previously received printed material concerning the program and had discussed the program with the supervisor. At this meeting, administrators reviewed the program with the principals and answered any questions that they might have had.

B. Completion of Student Listing Forms (Student Rosters)

Because of the very tight time schedule for the assessment, it was felt that it would be too much of a burden for school administrators to prepare these forms. Accordingly, on this first visit, ISIS administrators filled out the forms from school records made available to them. These forms were later used in the student sampling procedure.

C. Selection of Date and Time for the Assessment

The administrator and principal/coordinator determined a
mutually convenient time and date for the assessment.

D. Determination of Methods to be Used for Getting Students to the
Assessment

Techniques for notifying and securing students were decided upon.

E. Examination of Testing Room

Facilities were examined to assure that the testing room was
suitable and that proper student seating was available.

Throughout Phase I of the Assessment Procedure administrators were
required to make weekly reports by telephone to the Connecticut
supervisor informaing him of all pertinent information, decisions,
and problems which may have occurred.

Phase II: The Assessment - At the scheduled time for the school
Assessments, administrators performed the following administration
tasks:

A. Explanation of Student Selection Procedure to School Staff

As school staff was responsible for actually obtaining students
from classes, it was necessary that they fully understand the
student selection procedure including the codes used on the
student listing sheet. To obtain the required number of stu-
dents for each assessment, there was a "primary" sample as well
as up to three "backup" samples of students. To select students,
the office staff was to draw names first from the primary sample.
When all names from the sample were exhausted, they were
instructed to use the secondary sample, etc.

B. Administration of Assessment Procedure

Assessment procedure in the classroom consisted of the following
tasks:

1. Distribute test materials to each student.

2. Read instruction script to students in Appendix D.

3. At the end of the alloted time, the administrator collected
    the booklets and dismissed the students.

CODING

In order to facilitate the computer analysis of all the assessment data, it was necessary to record the data in a form convenient for keypunching. This was accomplished through the use of a specially designed "Transfer Form" reproduced in Appendix D. Detailed instructions for filling out these forms were given to the admini- strators and they were asked to complete them and return them to ISIS at the end of each day's administrations. This was also the basis for control of the administration schedule.

A single administration (8 - 15 children, a single age group, at a particular school) was recorded on each transfer form. Each line of the transfer form represented a test booklet submitted by one child, and each entry on the form (in columns 11 - 61) represented a student's answer to an individual exercise or exercise part. The numbers recorded in each box were the numbers of the answers selected by each child; if a question was unanswered, it was coded "9". Columns 1 - 9 were used to indicate Administration Area (Col. 1), Age (Col. 2), SOC (Col. 3), and School Number (4, 5, 6), Administra- tion Number (Col. 7), Respondent Number (Col. 8, 9).

During the middle of the administration, a check was made of the administrator's coding accuracy. Each administrator was asked to resubmit a transfer form for a particular administration. The resubmitted form was checked by computer against the previously submitted form for the same administration for discrepancies. The maximum discrepancy rate found in this manner was 1.47% (average was 0.51%). Assuming that the discrepancy was twice the error rate, (spot checking indicated that this assumption was valid) indicated a maximum error rate of only 0.74% which was considered adequate and all data was accepted as submitted. Further checks were made of coding accuracy which will be described in Section V - ANALYSIS METHODS.

V. ANALYSIS METHODS

DATA INPUT

Once all the transfer forms were received, they were keypunched, and the data fed into an IBM 370/165 computer. The first step in the computer analysis was a validity check of the data. Every item had a permissable range of answers depending on the number of multiple choice answers available for selection, or coded by the administrators, plus a "0" for "no answer". A table of these valid answers was input to the computer and all the assessment data checked for errors both in keypunching, and data transfer and coding by the administrators.

The errors that were detected by this "cleaning" process were checked and corrected, leaving a final combined error rate from all sources at less than half of one percent.

WEIGHTING

Weighting factors were applied to the results from each school prior to analyzing them further. The factor is defined as

$$F = (E_r/E_p) \ (Q_p/Q_r)$$

E_p = predicted (estimated) number of eligible students at a particular age and school

E_r = actual number of eligible students at the same age and school

Q_p = the number of students planned for assessment

Q_r = the number of completed tests submitted

The effect of the factor is two-fold. Since the probability of a particular school being sampled was proportional to E_p, it is necessary to adjust the results to reflect the difference between the predicted and real numbers of elibible students. This is accomplished by that part of the factor calculated from the ratio E_r/E_p. The second part of the factor (Q_p/Q_r) adjusts the results to reflect the difference between the number of assessments required to represent the school adequately in the sample (Q_p) and the number of valid assessments actually recorded (Q_r).

To illustrate the use of the factor, consider the following hypothetical data. Let us assume a school where the thirteen year old population was estimated at 160, the actual number of thirteen year olds reported was 214, the assessment quota was 36, and 43 valid assessment booklets were submitted. The weighting factor can then be calculated as

$$F = (214/160) \ (36/43) = 1.12$$

Next this factor will be applied to equall· hypothetical assessment question data from a particular school. ⼀onsider a question with five possible answers as shown below:

Answer	Responses		Adjusted Responses
1	2		2.24
2	28		31.36
3	3	x 1.12 =	3.36
4	5		5.60
5	4		4.48
No answer	1		1.12
	43		48.16

The adjusted responses calculated for each age at each school were used to calculate the percentages shown in the tables in the results section.

Although the weighting procedure is required for theoretical reasons, its actual impact is quite minor. The product moment correlations between the raw percentages correct and the weighted percentages correct were higher than 0.99 for both ages.

STANDARD ERRORS

If the reader wishes to compare the results achieved by one student group with those of another group, it is not sufficient merely to compare the percentage correct scores for each of the two groups. Such a comparison would only yield information about the specific pupils who were sampled, rather than the total populations represented by each sampled group.

In order to make valid comparisons of the percentage correct scores, it is necessary to define the following terms:

P_A	percentage correct scored by group A (on a particular item)
P_B	percentage correct scored by group B
SE_A	standard error associated with P_A
SE_B	standard error associated with P_B
$SE(DIFF) = (SF_A^2 + SE_B^2)^{\frac{1}{2}}$	standard error of the difference
$RSE = (P_A - F_B)/SE(DIFF)$	relative standard error

The value of the relative standard error of any difference is an indication of the probability of that difference being due to chance, i.e., the two populations do not differ in the same manner as the samples. Following is a table showing the probability value associated with various values of relative standard error.

Probability Interpretation of Relative Standard Errors

Relative Standard Error	Probability*
0.0	0.5000
0.4	0.6554
0.5	0.6915
0.6	0.7258
0.7	0.7580
0.8	0.7881
0.9	0.8159
1.0	0.8389
1.2	0.8849
1.4	0.9192
1.6	0.9452
1.3	0.9641
2.0	0.9772
2.5	0.9938
3.0	0.9987
3.5	0.9996
4.0	0.9999+

*This is the probability that the two population values differ in the same direction (though not necessarily by the same amount) as the two sample values being compared.

Data from Tables E.1.01 and E.1.02 in Appendix E will be used to illustrate the use of the table. Item 1 in Table E.1.01 shows a score of 59.4 for 13 year old girls (P_A) and a score of 59.6 for boys (P_B). Item 1 in Table E.1.02 shows a standard error of 0.6 for girls (SE_A) and 0.7 for boys (SE_B). Calculating SE(DIFF) yields $[(0.7)^2 + (0.6)^2]^{\frac{1}{2}} = 0.92$; calculating RSE as (59.6-59.4)/0.92 yields a relative standard error of approximately 0.22. The table indicates a probability value of about 0.59. The results can therefore be interpreted as follows. Although it is certainly true that in the sample of pupils actually tested, the boys did do better than the girls, the probability value of the relative standard error as calculated indicates a probability of only 59% that all Connecticut boys would score higher on Domain No. 114 than all Connecticut girls.

In general, the difference between scores is insignificant (i.e., it could have arisen from the happenstance of sampling) unless the difference between scores is large with respect to the standard error of that difference (large relative standard error). In the example cited, the relative standard error is quite small (0.22), so the data lend virtually no support to the conclusion that Connecticut's 13 year old boys really are better than 13 year old girls at answering Domain No. 114 correctly.

Any two populations may be compared in this manner. Two cautions must be observed, however, the first arises out of a mechanical consideration. For the approach to be used with strict accuracy, the two groups being compared must be independent of each other. The Connecticut "Male" results should not be compared with "Total Conn." because approximately half of "Total Conn." is "Male". The "Male" results should be compared only with the "Fem." results. SOC 1, 2, 3, or 4 can be compared directly with Conn. total, since even though they are a part of the total, they are a relatively small part.

The second caution arises from a more theoretical basis. The example shown above of the use of the standard errors was picked merely because it was the first item in the tables. If, however, we looked at all the boy/girl comparisons for Connecticut results in that table and picked an item to test because its difference was largest, we could not use the approach described here. The largest difference between 13 year old Connecticut boys and girls occurs in Question 2, where the girls' score is 48.2% correct and the boys' score is 55.6%, giving a difference of 7.4 percentage points. The standard errors for those two scores (from Table E.1.02) are 1.5 for boys and 1.5 for girls. If we calculate the relative standard error it comes to 3.49, which gives a probability of 0.9998 that Connecticut 13 year old girls really are better on Question 2 than are Connecticut boys.

But we cannot make this interpretation! Remember, we looked for the largest difference we could find, and then tested it. The test can only be used properly when the item to be examined is picked before the results are looked at. We picked the largest difference out of five to test. It's as though we asked each of five boys and five girls to flip a coin ten times. We might well find that the girl who flipped the most heads had eight of them, and the boy who flipped the least heads had only two. To judge from this that girls are better than boys at flipping heads is not valid. There are special statistical procedures that can be used, but they are too complex to be given here.

The sample score and its standard deviation also permit the estima-
tion of the likelihood that the true population score (P*) is
contained in any specified range. The probability is 0.678 that
the population score is within the range P+ 1 SE. Thus, for a P
of 59.4 and an SE of 0.6, the chances are about 2 in 3 (0.678)
that P* is between 58.5 and 60.0 (59.4 $\pm$ 0.6). For P $\pm$ 2SE the
probability is 0.954 and for P $\pm$ 3SE it rises to 0.997. Thus, for
any P value in the Results section, a range can be estimated which
will include the true overall population score at any desired level
of probability.

VI. RESULTS

The results section is divided into three major sub-sections. The first is a highlights portion which presents the overall important findings and their implications for guidance programs in Connecticut. This portion, with some additional material, forms the Summary Report, which is published separately. Since the highlights portion is designed for separate distribution, it contains some material that appears elsewhere in this full report. The second sub-section presents the findings for each of the 15 objectives (content domains) and discusses their use as base line data.

The third, and major, sub-section presents the detailed results for each of the content domains, with separate data for each of the demographic variables (age, sex, size of community, work experience, etc.) and discusses the differences among the sub-groups.

This last sub-section also examines individual questions in three ways. The first part looks at those questions whose scores do not show the same pattern of response across the demographic variables as do the other questions for that objective. The second part looks at easy questions -- those whose scores are above 80%. The third part looks at hard questions -- those where a wrong answer was chosen more often than the right answer. Although our interpretations and possible explanations of the data are presented, the reader may well want to construct or offer other interpretations and explanations. The data are presented in this section and in Appendix E so that this may be done.

HIGHLIGHTS

This Highlights Report presents a summary of an assessment of the
career planning and decision making skills of 4,465 Connecticut
13 year old and 17 year old students from 112 public schools around
the state, conducted in the Spring of 1974. A full report of the
study is contained in "Connecticut Career Guidance Assessment - 1974".
Test instruments for conducting the assessment were developed by
Clarence Johnson and Anita Mitchell in California and modified by
Connecticut State Department of Education and ISIS personnel. The
instruments consist of 92 items for each age group (13 year olds
and 17 year olds) of which 39 are common to both ages.

The 92 items were derived from 15 content domains which are the same
for both age groups. Table 1 shows these content domains and the
Guidance Objectives on which they are based. Figure 1 shows the
classification questions asked of the respondents. Four of the
questions were asked of both groups; the voc-tech question was asked
only of 13 year olds; the work experience question was asked only of
17 year olds. In addition to the results of these questions, the
performance scores were classified on the basis of the type of town
containing the sampled school. All Connecticut towns were classified
by size of community (SOC): Big City, Fringe City; Medium City;
Smaller Place. The definitions of these categories are contained in
the full report. Tables 2 and 3 show the composition of the sample
for each demographic category, cross-tabulated against SOC for each
age group.

Before looking at performance scores, some interesting results
can be seen in the answers to these demographic questions.
Approximately one-quarter of all respondents (13 year olds --
22.4%; 17 year olds -- 28.7%) are in a program of Career Educa-
tion. About the same proportion (26.8%) of the 13 year olds
have had discussions with counselors about career plans; this
jumps to about two-thirds (64.6%) for 17 year olds. Somewhat
surprisingly, both ages show the same proportion having answered
"yes" to the question, "Have you decided on the kind of job you
want to go into?" (13 year olds -- 62.5%; 17 year olds -- 64.7%).
Thus, the teaching of career planning should be emphasized at
ages lower than 13, in the areas of career awareness and orienta-
tion. Of course, many of the 13 year olds (as well as some of
the 17 year olds) will change their minds about entry jobs and
careers, but these data lend support to the crucial impact of
early career education.

TABLE 1

DEFINITION OF CONTENT DOMAINS

No.	Career Guidance Objective: Each student ...	Description (As in Test Instrument)	Short Name*	No. of Items At Each Age 13	17	No. of Common Items
114	... is aware of the concept of work in our society.	Job Satisfaction	Job Satisfaction	5	7	0
115	... is aware of the occupational structure in our society.	Occupational Levels, Occupational Fields, Work Emphasis	Levels, Fields, Emphasis	5	5	1
116	... is aware of significant occupational trends.	Occupational Trends	Occupational Trends	5	6	0
117	... is aware of relationships between subject skills and occupations.	Occupational Levels and Education	Levels and Education	6	6	6
118	... is aware that a person's occupation affects the amount and kind of leisure activities he can pursue.	Occupations Affect the Amount of Leisure Time	Leisure Time	5	7	5
119	... is aware of the effects of job specialization on job satisfaction.	Job Specialization Affects Job Satisfaction	Specialization/ Satisfaction	5	5	5
211	... makes a tentative choice of a segment (or level) of one occupational field that is consistent with his interests, aptitudes and abilities.	Awareness of Self Characteristics Help to Make Wise Career Choices	Sel. Awareness	5	5	0
212	... applies his knowledge of the relationship between life experiences and career choices.	Relationship Between Life Experiences and Career Choices	Life Experiences	6	6	0
213	... applies his knowledge of the relationship between school subject areas and occupations to preparing an educational plan.	Relationships Between School Subject Areas and Occupations in Preparing an Educational Plan	School Subject Areas	4	5	0
221	... identifies career alternatives that are consistent with ability and interest.	Identifying Career Alternatives That are Consistent with Abilities and Interests	Abilities and Interests	5	4	1

(Continued)

TABLE 1 (Cont'd.)

DEFINITION OF CONTENT DOMAINS

No.	Career Guidance Objective: Each student ...	Description (As in Test Instrument)	Short Name*	No. of Items At Each Age		No. of Common Items
				13	17	
222	is competent in solving career problems through planning, decision making, implementing decisions, and education.	Steps in Career Planning	Steps in Planning	7	9	0
224	understands that there is a wide range in the degree and kinds of satisfaction that are derived from work.	Satisfaction Derived from Work	Satisfaction from Work	2	5	4
311	participates in a training program that is necessary for entrance into his chosen career.	Training Programs for Occupations	Training Programs	10	10	10
312	participates in activities that are related to and/or expected in his chosen career.	Activities Related to Careers	Related Activities	7	7	2
321	will apply his knowledge of the relationship between his chosen career and his measured ability and interest.	Relationship Among Occupational Level, Measured Verbal Ability, Math Ability, and Interests	Level/Abilities/ Interests	5	5	5

*These names are used throughout the tables in this report to identify Content Domains.

FIGURE 6.1.1

DEMOGRAPHIC QUESTIONS

I am

1 _____ Female

2 _____ Male

In the last twelve months, have you been in a program of career guidance or career education?

1 _____ Yes

2 _____ No

In the last twelve months, have you discussed career plans with a School Guidance Counselor?

1 _____ Yes

2 _____ No

3 _____ Don't Remember

17 YR. OLDS ONLY

We want to know if you have had any experience working <u>for money outside your home</u>. Mark the statement below that best describes you.

1 _____ I now have a regular job that I work at at least one day or evening a week.

2 _____ I have worked during the summer or some time during the last twelve months.

3 _____ I have not worked during the last twelve months.

4 _____ I have been in a work-study program in school.

Have you decided on the kind of job you want to go into?

1 _____ Yes

2 _____ No

13 YR. OLDS ONLY

Are you planning to atte   a vocational-technical school?

1 _____ Yes

2 _____ No

3 _____ Undecided

TABLE 6.1.2

FINAL SAMPLE COMPOSITION
(in percent)

13 year olds

Demographic Variables	Size of Community				
	Big City	Fringe City	Medium City	Smaller Place	Total
Total Respondents (No.)	(409)	(555)	(641)	(687)	(2292)
Sex					
Female	49.4	50.8	49.5	52.1	50.6 (1159)
Male	50.4	48.7	49.9	47.9	49.1 (1125)
No Answer	0.2	0.5	0.6	0.0	0.3 (8)
Career Guidance/Education Program					
Yes	29.3	21.1	27.3	14.8	22.4 (514)
No	67.7	77.3	70.8	83.7	75.7 (1735)
No Answer	2.9	1.6	1.9	1.5	1.9 (43)
Guidance Counselor Discussions					
Yes	32.5	25.9	28.7	22.3	26.8 (614)
No	49.4	66.1	61.0	68.3	62.8 (1429)
Don't Remember	15.2	6.5	8.9	8.2	9.2 (211)
No Answer	2.9	1.4	1.4	1.3	1.7 (38)
Planning Voc-Tech School					
Yes	23.0	7.9	13.1	10.6	12.9 (295)
No	40.8	55.5	49.1	52.4	50.2 (1150)
Undecided	32.8	35.1	29.3	35.1	33.1 (758)
No Answer	3.4	1.4	8.4	1.9	3.9 (89)
Job Decision					
Yes	66.7	59.5	62.7	62.3	62.5 (1433)
No	30.1	38.7	35.3	36.0	35.4 (811)
No Answer	3.2	1.3	2.0	1.7	2.1 (48)

TABLE 6.1.3

FINAL SAMPLE COMPOSITION
(in percent)
17 year olds

	Size of Community				
Demographic Variables	Big City	Fringe City	Medium City	Smaller Place	Total
Total Respondents (No.)	(452)	(479)	(605)	(637)	(2173)
Sex					
Female	50.0	51.1	49.1	55.6	51.6 (1122)
Male	49.8	48.9	50.6	44.0	48.1 (1045
No Answer	0.2	0.0	0.3	0.5	0.3 (6)
Career Guidance/Education Program					
Yes	27.2	29.2	32.1	26.1	28.7 (623)
No	72.1	70.4	67.6	73.2	70.8 (1538)
No Answer	0.7	0.4	0.3	0.8	0.6 (12)
Guidance Counselor Discussions					
Yes	65.5	72.2	56.5	65.9	64.6 (1404)
No	25.0	23.2	37.0	27.5	28.7 (623)
Don't Remember	9.3	4.4	6.3	6.1	6.4 (140)
No Answer	0.2	0.2	0.2	0.5	0.3 (6)
Work Experience					
Regular Job	38.5	46.8	49.3	44.7	45.1 (981)
Summer Job	41.8	31.7	34.7	35.3	35.7 (776)
Not Worked	13.3	12.5	11.1	15.1	13.0 (283)
Work Study	4.4	7.5	3.8	3.5	4.6 (101)
No Answer	2.0	1.5	1.2	1.4	1.5 (32)
Job Decision					
Yes	67.9	63.0	63.0	65.3	64.7 (1406)
No	31.4	36.3	36.5	34.2	34.7 (755)
No Answer	0.7	0.6	0.5	0.5	0.6 (12)

While 12.9% of all 13 year olds are planning to attend a
vocational-technical school, fully 23% of the students from
big cities intend to. These figures may be of aid in planning
future resource allocations. The demand clearly exceeds the
supply, since there is currently room for only about 10% of
Connecticut's students in voc-tech schools.

Although work-study programs for 17 year olds involve only
4.6% of the students, almost half (45.1%) have regular jobs
once a week for money outside the home. Only 13% say they
have not worked in the past 12 months. The work experience
of all these students provides a rich source for integrating
school and non-school interests and material.

The overall results of the study are shown in Tables 4, 5, 6, and
Figure 2. Some caution is required in interpreting these data.
The test instruments used in this study, while carefully developed,
pretested, and modified, have no normative data. Therefore,
differences between age groups and between domains within age
groups may be due, at least in part, to differences in inherent
difficulty levels of the test questions. However, since there
are 39 common test items between the tests for the two age groups,
age comparisons are more valid than domain comparisons within ages.
In spite of these cautions, some useful interpretations can be
made of the data. These are presented in the later part of this
Highlights Report and in more detail in the full report.

Throughout this report we have used average performance scores,
where average is defined as the arithmetic mean $\bar{X} = \left(\sum_{i=1}^{N} X_i\right)/N$ where
the X_i's are the percentage of students selecting the correct answer
for the ith question, and N is the number of questions in a parti-
cular content domain. It can be shown that this is the same as
finding the average raw score and converting it to a percentage.

The patterns shown in Table 4 apply to many of the individual
content domains; departures are noted where they appear. There are
three rather obvious conclusions to be drawn from these data. First,
and not surprisingly, the average score for 17 year olds is about
seven percent higher than the average score for 13 year olds, although
some individual questions deviate from this pattern. Second, students
from big cities average about six percent lower than those from other
size towns. A possible explanation for this may be the effect of
reading skills on this test (or any written test). The Connecticut
Reading Assessment of 1971-1972 showed that big city students averaged
about ten percent below others in reading.

TABLE 6.1.4

AVERAGE PERFORMANCE SCORES FOR ALL DOMAINS
BY DEMOGRAPHIC CATEGORIES
(in percent)

Demographic Category[a]	Age	
	13 yrs.	17 yrs.
Connecticut	45.3	52.6
Sex		
Female	45.8	53.0
Male	44.8	52.2
Size of Community		
Big City	39.7	48.1
Fringe City	47.5	55.4
Medium City	45.8	52.7
Smaller Place	47.1	53.2
Career Guidance or Education		
Yes	43.5	50.9
No	45.9	53.3
Counselor Discussions		
Yes	45.4	54.0
No	46.1	51.0
Don't Remember	40.1	46.2
Planning Voc-Tech School		
Yes	42.0	Not
No	46.7	
Undecided	44.7	Asked
Work Experience		
Regular Job		54.0
Summer Job	Not	51.9
Not Worked	Asked	51.5
Work Study		50.3
Job Decision		
Yes	45.1	52.4
No	45.8	53.1

[a] For full text of the demographic questions see Section III or Appendix I.

TABLE 6.1.5

CONTENT DOMAIN AVERAGE PERFORMANCE
BY
SIZE OF COMMUNITY
(13 year olds)

Content Domain			Size of Community			
No.	Short Name	Conn.	Big City	Fringe City	Medium City	Smaller Place
114	Job Satisfaction	59.5	55.0	61.4	60.4	60.5
115	Levels, Fields, Emphasis	46.9	45.0	49.0	44.9	48.3
116	Occupational Trends	51.1	49.0	50.2	49.6	54.6
117	Levels and Education	35.8	33.2	37.2	36.0	36.5
118	Leisure Time	54.6	53.5	55.3	54.7	54.7
119	Specialization/Satisfaction	41.6	37.1	43.4	42.7	42.6
211	Self Awareness	67.4	58.4	70.3	68.8	70.1
212	Life Experiences	61.1	54.3	63.6	62.8	62.5
213	School Subject Areas	56.1	42.6	62.6	56.6	59.9
221	Abilities and Interests	40.4	35.1	41.3	42.0	42.2
222	Steps in Planning	22.0	16.0	23.6	23.2	23.9
224	Satisfaction from Work	49.6	38.9	53.4	50.6	53.2
311	Training Programs	31.7	27.5	33.2	32.5	32.8
312	Related Activities	27.4	23.2	29.9	27.5	28.2
321	Level/Abilities/Interests	34.0	26.1	38.1	34.0	36.4

TABLE 6.1.6

CONTENT DOMAIN AVERAGE PERFORMANCE
BY
SIZE OF COMMUNITY
(17 year olds)

Content Domain			Size of Community			
No.	Short Name	Conn.	Big City	Fringe City	Medium City	Smaller Place
114	Job Satisfaction	65.9	61.2	66.1	67.5	67.7
115	Levels, Fields, Emphasis	56.1	48.8	60.5	56.5	57.0
116	Occupational Trends	42.4	40.2	43.6	41.8	43.2
117	Levels and Education	42.1	40.7	45.5	41.8	40.2
118	Leisure Time	58.2	57.4	60.5	58.1	56.8
119	Specialization/Satisfaction	49.7	43.9	52.7	49.4	51.4
211	Self Awareness	73.2	67.6	77.4	72.6	73.8
212	Life Experiences	47.6	43.9	50.3	49.0	46.7
213	School Subject Areas	60.1	53.5	64.5	59.4	61.4
221	Abilities and Interests	67.4	62.3	69.5	67.1	69.2
222	Steps in Planning	56.8	50.0	60.0	57.2	58.2
224	Satisfaction from Work	34.7	32.7	37.6	33.5	34.5
311	Training Programs	44.4	41.8	46.6	44.0	44.5
312	Related Activities	44.2	38.6	47.6	44.7	44.9
321	Level/Abilities/Interests	46.3	38.3	49.3	47.4	48.3

FIGURE 6.1.2

DEVIATIONS FROM AVERAGE PERFORMANCE SCORES
FOR ALL CONTENT DOMAINS
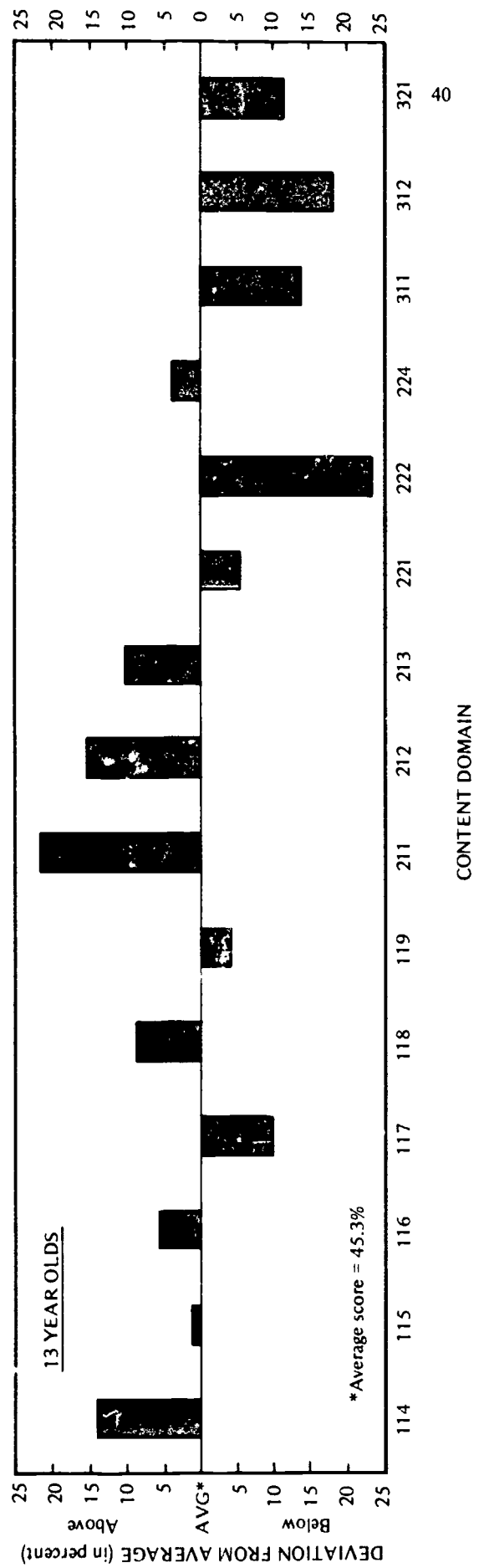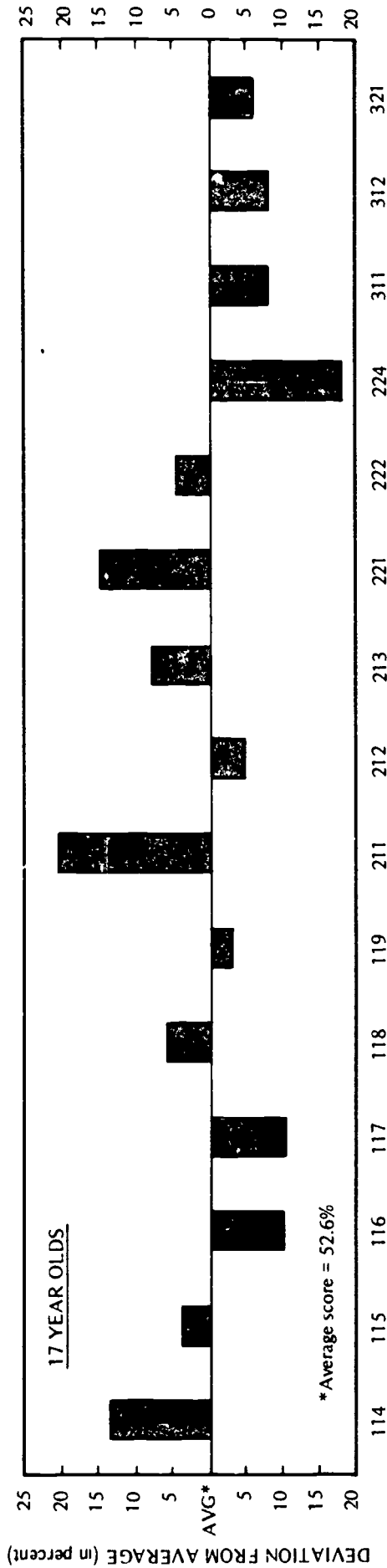
It is also likely that students from big cities often have less varied out-of-school experiences that would increase their general knowledge about jobs, job skills, career planning, etc.

The third obvious conclusion is that, for 17 year olds, discussions with counselors about careers has a small, but positive impact (54.0% vs. 51.0%), and those with more work experience do better -- a slight, but consistent trend from work-study programs to regular weekly work (50.3%, 51.5%, 51.9%, 54.0%).

A less obvious, but quite interesting conclusion is that sex makes little or no difference in the performance scores. There may be several reasons for this: the generally better reading scores for girls, the increased interest and participation in the work force (40% of the U.S. work force is female), the changing sex roles of youth, or the lack of many sex-biased questions in the test. This suggests that both boys and girls can profit from similar programs and curricula in career education.

Surprisingly, however, exposure to such programs makes no difference in performance scores. In fact, those students in programs of career guidance or education scored slightly lower than students not in such programs. There are many possible explanations for this, including the selection of students to be in such programs, but these data taken along with an examination of the scores on specific test questions suggest strongly that the knowledge tested by this instrument is mostly obtained out of school, from life experiences, not from curriculum materials. Even Domain 115 -- Levels, Fields, and Emphasis -- which contains much material from such curricula, does not produce any score increment for students in such programs. Career education is just not having much of an impact.

The remaining demographic variables do not make any significant difference in scores and have only negative interpretive value -- we know what doesn't matter.

There is a conclusion significant to Connecticut education that does not come from the demographic data. Two of the content domains (a total of 16 questions - identical for 13 and 17 year olds) tapped the same area of career awareness, the educational requirements of various jobs. Students were presented a list of jobs and asked to identify the educational requirements for these jobs. The response categories in general were: four years of college; schooling after high school (including apprenticeship); high school graduation (including voc-tech school); less than high school education. Half of all students combined (52.1%) could properly identify the educational requirements of those jobs (there were nine of them) which required either college graduation or less than high school graduation.

Of those jobs which required less than college graduation, but at least high school graduation, only one-fifth (20.2%) of all students could correctly identify the educational requirements. The conclusion is obvious; in general, Connecticut students are not aware of those jobs for which they can qualify with high school education, or some post-secondary school education, which again points out the need for earlier career education.

The rest of this Highlights Report presents data on each of the fifteen content domains and discusses briefly their meaning.

TABLE 6.1.07

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 114 - JOB SATISFACTION

| | 13 Year Olds | | 17 Year Olds | |
Demographic Category	All Domains	Domain 114	All Domains	Domain 114
CONNECTICUT	45.3	59.5	52.6	65.0
SEX				
Female	45.8	59.4	53.0	66.6
Male	44.0	59.6	52.2	65.2
SIZE OF COMMUNITY				
Big City	39.7	55.0	48.1	61.2
Fringe City	47.5	61.4	55.4	66.1
Medium City	45.8	60.4	52.7	67.5
Smaller Place	47.1	60.5	53.2	67.7
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	59.1	50.9	64.8
No	45.9	59.7	53.3	66.4
COUNSELOR DISCUSSIONS				
Yes	45.4	59.7	54.0	67.2
No	46.1	59.9	51.0	64.2
Don't Remember	40.1	57.3	46.2	61.3
PLANNING VOC-TECH SCHOOL				
Yes	42.0	57.6		
No	46.1	60.8	NOT ASKED	
Undecided	44.7	58.6		
WORK EXPERIENCE				
Regular Job			54.0	66.7
Summer Job			51.9	65.5
Not Worked	NOT ASKED		51.5	64.8
Work Study			50.3	67.2
JOB DECISION				
Yes	45.1	59.8	52.4	65.9
No	45.9	59.2	53.1	66.0

CONTENT DOMAIN 114 -- JOB SATISFACTION

CAREER GUIDANCE OBJECTIVE: Each student is
aware of the concept
of work in our society.

Both age groups performed well above average,
with the older students scoring their usual six
percent higher than the younger ones. The usual
pattern for Size of Community is shown; big city
students scoring about five percent below the other
students.

None of the other demographic variables made
any substantial difference, showing that, for the
jobs used in the test, kitchen-helper and clerk-typist,
all students, at both ages, understood the sources of
job satisfaction.

TABLE 6.1.08

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 115 - LEVELS, FIELDS, EMPHASIS

| | 13 Year Olds | | 17 Year Olds | |
Demographic Category	All Domains	Domain 115	All Domains	Domain 115
CONNECTICUT	45.3	46.9	52.6	56.1
SEX				
Female	45.8	48.6	53.0	57.7
Male	44.8	45.3	52.2	54.4
SIZE OF COMMUNITY				
Big City	39.7	45.0	48.1	48.8
Fringe City	47.5	49.0	55.4	60.6
Medium City	45.8	44.9	52.7	56.5
Smaller Place	47.1	48.3	53.2	57.0
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	46.5	50.9	53.6
No	45.9	47.2	53.3	57.3
COUNSELOR DISCUSSIONS				
Yes	45.4	46.7	54.0	57.4
No	46.1	47.2	51.0	54.5
Don't Remember	40.1	46.5	46.2	50.3
PLANNING VOC-TECH SCHOOL				
Yes	42.0	43.8		
No	46.7	47.0	NOT ASKED	
Undecided	44.7	48.1		
WORK EXPERIENCE				
Regular Job			54.0	58.4
Summer Job			51.9	55.3
Not Worked	NOT ASKED		51.5	53.3
Work Study			50.3	50.1
JOB DECISION				
Yes	45.1	46.9	52.4	56.1
No	45.8	47.1	53.1	56.3

CONTENT DOMAIN 115 -- OCCUPATIONAL LEVELS,
OCCUPATIONAL FIELDS,
WORK EMPHASIS

CAREER GUIDANCE OBJECTIVE: Each student is aware
of the occupational
structure in our society
(occupational-levels,
occupational-fields, and
work role emphasis) and
their relationships.

Both age groups performed at about average levels,
the older students scoring about nine percent higher
than the younger students. The usual effect of the big
cities was present, but to a much less degree for 13
year olds (only about two percent lower than the others),
and to a somewhat larger degree for the 17 year olds
(about nine percent lower than the average for the other
SOC scores). The older big city students scored only
four percent above their younger neighbors, suggesting
that in big cities, knowledge of the difference in
meaning of the three key words (Level, Field, Emphasis)
is not learned by many students in the intervening four
years.

It is not learned by those in the career education
or guidance programs either, since these students scored
lower than those not in such programs.

Counselor discussions and work experience helped
some 17 year olds score higher than those without these
experiences.

TABLE 6.1.09

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 116 - OCCUPATIONAL TRENDS

Demographic Category	13 Year Olds		17 Year Olds	
	All Domains	Domain 116	All Domains	Domain 116
CONNECTICUT	45.3	51.1	52.6	42.4
SEX				
Female	45.8	50.9	53.0	41.6
Male	44.8	51.4	52.2	43.1
SIZE OF COMMUNITY				
Big City	39.7	49.0	48.1	40.2
Fringe City	47.5	50.2	55.4	43.6
Medium City	45.8	49.6	52.7	41.8
Smaller Place	47.1	54.6	53.2	43.2
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	50.5	50.9	41.5
No	45.9	51.3	53.3	42.7
COUNSELOR DISCUSSIONS				
Yes	45.4	51.0	54.0	42.8
No	46.1	51.5	51.0	41.9
Don't Remember	40.1	48.9	46.2	39.7
PLANNING VOC-TECH SCHOOL				
Yes	42.0	49.2		
No	46.7	52.0	NOT ASKED	
Undecided	44.7	50.9		
WORK EXPERIENCE				
Regular Job			54.0	42.6
Summer Job			51.9	42.3
Not Worked	NOT ASKED		51.5	42.8
Work Study			50.3	40.9
JOB DECISION				
Yes	45.1	50.8	52.4	42.4
No	45.8	51.8	53.1	42.3

CONTENT DOMAIN 116 -- OCCUPATIONAL TRENDS

CAREER GUIDANCE OBJECTIVE: Each student is aware of significant occupational trends.

This domain is one of three in which the average score of 13 year olds is higher than that of 17 year olds (51.1% vs. 42.4%). The students were asked to estimate whether, in the future, more, the same, or fewer people would be required in various occupations. The occupations listed were different at each age. For 13 year olds, they were: supermarket manager; able seaman; dental assistant; electrical engineer; and business machine repairman. For 17 year olds, they were: mathematicians; actors and actresses; foresters; office machine operators; elementary teachers; and computer programmers.

The tests also differed by asking the younger students about the future requirements in number and the older students in percent. We feel the peculiar relation between the ages is mostly due to differences in item difficulty. Another peculiarity of these data is that the big city students scored about as well as the other students. This may suggest that urban disadvantages do not inhibit one's ability to estimate future trends.

TABLE 6.1.10

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 117 - LEVELS AND EDUCATION

Demographic Category	13 Year Olds		17 Year Olds	
	All Domains	Domain 117	All Domains	Domain 117
CONNECTICUT	45.3	35.8	52.6	42.1
SEX				
Female	45.8	36.0	53.0	41.5
Male	44.8	35.7	52.2	42.7
SIZE OF COMMUNITY				
Big City	39.7	33.2	48.1	40.7
Fringe City	47.5	37.2	55.4	45.5
Medium City	45.8	36.0	52.7	41.8
Smaller Place	47.1	36.5	53.2	40.2
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	35.3	50.9	40.8
No	45.9	35.9	53.3	42.6
COUNSELOR DISCUSSIONS				
Yes	45.4	36.5	54.0	42.4
No	46.1	36.2	51.0	42.4
Don't Remember	40.1	31.4	46.2	37.5
PLANNING VOC-TECH SCHOOL				
Yes	42.0	34.4		
No	46.7	36.4	NOT ASKED	
Undecided	44.7	35.7		
WORK EXPERIENCE				
Regular Job			54.0	42.3
Summer Job			51.9	42.0
Not Worked	NOT ASKED		51.5	42.0
Work Study			50.3	42.3
JOB DECISION				
Yes	45.1	35.6	52.4	41.7
No	45.8	36.1	53.1	42.7

CONTENT DOMAIN 117 -- OCCUPATIONAL LEVELS
AND EDUCATION

CAREER GUIDANCE OBJECTIVES: Each student is aware
of relationships between
subject skills and
occupations.

Both age groups scored well below average on the
same set of questions testing knowledge of the level
of education (at least 4 years of college, schooling
after high school, high school graduation, less than
high school graduation) required to enter six different
jobs (secretary, meatcutter, electronics technician,
electrical engineer, roughneck [oil field], draftsman).
Usually the educational requirements were overestimated,
suggesting a fruitful field for encouraging wider career
horizons for children who are not college bound.

The standard pattern of demographic variation is
shown by the results for this domain.

TABLE 6.1.11

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 118 - LEISURE TIME

| | 13 Year Olds | | 17 Year Olds | |
Demographic Category	All Domains	Domain 118	All Domains	Domain 118
CONNECTICUT	45.3	54.6	52.6	58.2
SEX				
Female	45.8	53.7	53.0	56.4
Male	44.8	55.7	52.2	60.1
SIZE OF COMMUNITY				
Big City	39.7	53.5	48.1	57.4
Fringe City	47.5	55.3	55.4	60.5
Medium City	45.8	54.7	52.7	58.1
Smaller Place	47.1	54.7	53.2	56.8
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	53.2	50.9	58.2
No	45.9	54.8	53.3	58.2
COUNSELOR DISCUSSIONS				
Yes	45.4	53.3	54.0	58.3
No	46.1	54.9	51.0	58.2
Don't Remember	40.1	·53.9	46.2	57.3
PLANNING VOC-TECH SCHOOL				
Yes	42.0	54.3		
No	46.7	54.8	NOT ASKED	
Undecided	44.7	53.8		
WORK EXPERIENCE				
Regular Job			54.0	59.2
Summer Job	NOT ASKED		51.9	58.0
Not Worked			51.5	56.8
Work Study			50.3	56.0
JOB DECISION				
Yes	45.1	54.8	52.4	57.4
No	45.8	53.6	53.1	59.7

CONTENT DOMAIN 118 -- OCCUPATIONS AFFECT THE
AMOUNT OF LEISURE TIME

CAREER GUIDANCE OBJECTIVE: Each student is aware
that a person's occupation
affects the amount and
kind of leisure activities
he can pursue.

Both ages scored above average on this domain; the
younger groups scoring 9.3 percent above average; the
older group only 5.6 percent above average. All five of
the questions asked of the 13 year olds were also asked
of the 17 year olds. All the questions asked students
to indicate how much leisure time was involved in various
jobs. The 17 year olds were asked about two additional
jobs, as well.

The decrement usually shown by big city students
was quite small for this domain, only about one percent,
suggesting again, that for knowledge derived from common
life experiences, big city children do about as well as
others. This is supported by the relatively small age
difference, only 3.6 percentage points. What is learned
about leisure time in common jobs seems to be quite well
learned by the age of 13.

Boys scored slightly higher than girls, a departure
from the standard pattern.

TABLE 6.1.12

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 119 - SPECIALIZATION/SATISFACTION

| | 13 Year Olds | | 17 Year Olds | |
Demographic Category	All Domains	Domain 119	All Domains	Domain 119
CONNECTICUT	45.3	41.6	52.6	49.7
SEX				
Female	45.8	42.9	53.0	51.1
Male	44.8	40.4	52.2	48.1
SIZE OF COMMUNITY				
Big City	39.7	37.1	48.1	43.9
Fringe City	47.5	43.4	55.4	52.7
Medium City	45.8	42.7	52.7	49.4
Smaller Place	47.1	42.6	53.2	51.4
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	40.9	50.9	47.8
No	45.9	42.0	53.3	50.5
COUNSELOR DISCUSSIONS				
Yes	45.4	42.4	54.0	51.6
No	46.1	42.3	51.0	47.2
Don't Remember	40.1	36.5	46.2	42.1
PLANNING VOC-TECH SCHOOL				
Yes	42.0	37.9		
No	46.7	43.8	NOT ASKED	
Undecided	44.7	39.9		
WORK EXPERIENCE				
Regular Job			54.0	51.1
Summer Job	NOT ASKED		51.9	49.2
Not Worked			51.5	48.3
Work Study			50.3	46.4
JOB DECISION				
Yes	45.1	41.5	52.4	49.3
No	45.8	42.0	53.1	50.4

CONTENT DOMAIN 119 -- JOB SPECIALIZATION AFFECTS
JOB SATISFACTION

CAREER GUIDANCE OBJECTIVE: Each student is aware of
the effects of job speciali-
zation on job satisfaction.

Both age groups scored below average by about the
same amount (about three percent) on these questions,
which were the same for both age groups. A description
of Sam, a taxi driver is given, and then questions are
asked about Sam's career and the satisfactions he derives
from it. The test items place some premium on reading
skills which may account for the somewhat low overall
scores. Girls scored about three percent higher than
boys, again perhaps because of reading skills.

The big city students scored about six percent below
other students, which is consistent with the general pattern,
as are the other demographic comparisons for this domain.

TABLE 6.1.13

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 211 - SELF AWARENESS

	13 Year Olds		17 Year Olds	
Demographic Category	All Domains	Domain 211	All Domains	Domain 211
CONNECTICUT	45.3	67.4	52.6	73.2
SEX				
Female	45.8	69.3	53.0	73.9
Male	44.8	65.4	52.2	72.4
SIZE OF COMMUNITY				
Big City	39.7	58.4	48.1	67.6
Fringe City	47.5	70.3	55.4	77.4
Medium City	45.8	68.6	52.7	72.6
Smaller Place	47.1	70.1	53.2	73.8
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	63.5	50.9	71.6
No	45.9	68.6	53.3	73.9
COUNSELOR DISCUSSIONS				
Yes	45.4	67.1	54.0	75.7
No	46.1	68.5	51.0	69.9
Don't Remember	40.1	60.4	46.2	63.1
PLANNING VOC-TECH SCHOOL				
Yes	42.0	62.7		
No	46.7	68.7	NOT ASKED	
Undecided	44.7	67.0		
WORK EXPERIENCE				
Regular Job			54.0	75.4
Summer Job			51.9	72.6
Not Worked	NOT ASKED		51.5	71.0
Work Study			50.3	67.8
JOB DECISION				
Yes	45.1	66.9	52.4	73.0
No	45.8	68.2	53.1	73.7

CONTENT DOMAIN 211 -- AWARENESS OF SELF CHARACTERISTICS
HELP TO MA'.E WISE CAREER CHOICES

CAREER GUIDANCE OBJECTIVE: Each student makes a tentative
choice of a segment (or level)
of one occupational field that
is consistent with his interests,
aptitudes, and abilities.

Both age groups did extremely well on these questions,
about 22 percent above the averages for their ages. The
questions described the likes, aptitudes, and school records
of different students and then asked about potential job
choices for them. The question style is common to both ages;
the specifics were not.

The usual pattern across demographic variables is present,
but many differences are exaggerated. Big city students
scored about ten points behind other students. Counselor
discussions for 17 year olds yielded a six percent advantage;
17 year olds with regular jobs scored about five percent
above others of their age. Thirteen year old girls scored
four percent higher than 13 year old boys.

Big city 13 year olds scored 11 percent lower than
other 13 year olds, perhaps a reflection of the cultural
differences and the attitudes toward self and self-awareness
in some groups of big city residents.

TABLE 6.1.14

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 212 - LIFE EXPERIENCES

Demographic Category	13 Year Olds		17 Year Olds	
	All Domains	Domain 212	All Domains	Domain 212
CONNECTICUT	45.3	61.1	52.6	47.6
SEX				
Female	45.8	62.1	53.0	47.0
Male	44.8	60.1	52.2	48.3
SIZE OF COMMUNITY				
Big City	39.7	54.3	48.1	43.9
Fringe City	47.5	63.6	55.4	50.3
Medium City	45.8	62.8	52.7	49.0
Smaller Place	47.1	62.5	53.2	46.7
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	59.7	50.9	46.9
No	45.9	61.7	53.3	47.9
COUNSELOR DISCUSSIONS				
Yes	45.4	61.9	54.0	48.0
No	46.1	61.8	51.0	47.5
Don't Remember	40.1	55.2	46.2	45.6
PLANNING VOC-TECH SCHOOL				
Yes	42.0	58.6		
No	46.7	62.2	NOT ASKED	
Undecided	44.7	60.5		
WORK EXPERIENCE				
Regular Job			54.0	48.2
Summer Job	NOT ASKED		51.9	47.0
Not Worked			51.5	48.4
Work Study			50.3	47.1
JOB DECISION				
Yes	45.1	60.5	52.4	47.4
No	45.9	62.6	53.1	48.1

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CONTENT DOMAIN 212 -- RELATIONSHIPS BETWEEN LIFE
EXPERIENCES AND CAREER CHOICES

CAREER GUIDANCE OBJECTIVE: Each student recognizes
the relationship between
life experiences and career
choice.

This is the second of three content domains (116,
212, 224) in which the 13 year old average score (61.1%)
is higher than the 17 year old score (47.6%). The older
group scored 5 percent below their average, while the
younger group scored sixteen percent above their average.
The tests are of similar structure for both ages, but
have different particulars. They describe career situa-
tions involving a crisis or a major choice for which the
given background material is helpful in deciding on new
career plans. The material may have been too difficult
for the older group and too easy for the younger group,
or it may be that the context of the dilemma presented
to the 13 year olds permitted better identification, and
thus better performance.

The usual demographic patterns obtained, with the
big city 13 year olds scoring nine percent below other 13
year olds, but still scoring 15 percent above their average
for all domains.

TABLE 6.1.15

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 213 - SCHOOL SUBJECT AREAS

Demographic Category	13 Year Olds		17 Year Olds	
	All Domains	Domain 213	All Domains	Domain 213
CONNECTICUT	45.3	56.1	52.6	60.1
SEX				
Female	45.8	56.7	53.0	62.4
Male	44.8	55.4	52.2	57.6
SIZE OF COMMUNITY				
Big City	39.7	42.6	48.1	53.5
Fringe City	47.5	62.6	55.4	64.5
Medium City	45.8	56.6	52.7	59.4
Smaller Place	47.1	59.9	53.2	61.4
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	52.7	50.9	57.0
No	45.9	57.2	53.3	61.3
COUNSELOR DISCUSSIONS				
Yes	45.4	56.3	54.0	62.6
No	46.1	58.0	51.0	56.3
Don't Remember	40.1	43.6	46.2	51.1
PLANNING VOC-TECH SCHOOL				
Yes	42.0	47.8		
No	46.7	58.7	NOT ASKED	
Undecided	44.7	54.0		
WORK EXPERIENCE				
Regular Job			54.0	62.0
Summer Job	NOT ASKED		51.9	58.8
Not Worked			51.5	60.1
Work Study			50.3	54.2
JOB DECISION				
Yes	45.1	55.6	52.4	60.0
No	45.8	57.3	53.1	60.2

CONTENT DOMAIN 213 -- RELATIONSHIP BETWEEN SCHOOL
                      SUBJECT AREAS AND OCCUPATIONS
                      IN PREPARING AN EDUCATIONAL PLAN

CAREER GUIDANCE OBJECTIVE: Each student applies his
                          knowledge of the relation-
                          ship between school subject
                          areas and occupations to
                          preparing an educational plan.

Both age groups scored above average, the younger
group exceeding its all-domain average by 11 percent. The
fringe city students scored better than average and the
13 year old big city students scored about 17 percent below
the other 13 year olds. This domain seems to be more sen-
sitive than most to the variations among population groups.

The questions (different for each age) tell what
courses someone is taking and how well they are doing, and
ask for appropriate career choices. The usual patterns
obtain; it seems that most students know about the relation
between school performance and career choice.

TABLE 6.1.16

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 221 - ABILITIES AND INTERESTS

Demographic Category	13 Year Olds		17 Year Olds	
	All Domains	Domain 221	All Domains	Domain 221
CONNECTICUT	45.3	40.4	52.6	67.4
SEX				
Female	45.8	40.5	53.0	67.9
Male	44.8	40.3	52.2	66.8
SIZE OF COMMUNITY				
Big City	39.7	35.1	48.1	62.3
Fringe City	47.5	41.3	55.4	69.5
Medium City	45.8	42.0	52.7	67.1
Smaller Place	47.1	42.2	53.2	69.2
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	38.3	50.9	65.1
No	45.9	41.1	53.3	68.2
COUNSELOR DISCUSSIONS				
Yes	45.4	40.2	54.0	69.6
No	46.1	41.6	51.0	64.5
Don't Remember	40.1	33.3	46.2	57.2
PLANNING VOC-TECH SCHOOL				
Yes	42.0	35.3	NOT ASKED	
No	46.7	40.7		
Undecided	44.7	40.4		
WORK EXPERIENCE				
Regular Job	NOT ASKED		54.0	69.3
Summer Job			51.9	66.5
Not Worked			51.5	65.6
Work Study			50.3	64.7
JOB DECISION				
Yes	45.1	40.2	52.4	66.9
No	45.8	40.7	53.1	68.2

CONTENT DOMAIN 221 -- IDENTIFYING CAREER ALTERNATIVES
THAT ARE CONSISTENT WITH ABILITIES
AND INTERESTS

CAREER GUIDANCE OBJECTIVES: Each student identifies
career alternatives that are
consistent with ability and
interest.

This content domain shows about average patterns across
all variables, except that the spread between the two age
groups is larger than usual (27 percent). The 13 year olds
scored five percent below average, while the 17 year olds
scored 12 percent above their average.

The test questions gave short descriptions of a student
and his or her school record, and interests and hobbies.
The respondent was required to select a group of jobs (out
of a set of four) that would be appropriate for the character
in the vignette.

The older group of students seem to have a good grasp
of the impact of differing interest patterns on career
choices.

TABLE 6.1.17

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 222 - STEPS IN PLANNING

Demographic Category	13 Year Olds		17 Year Olds	
	All Domains	Domain 222	All Domains	Domain 222
CONNECTICUT	45.3	22.0	52.6	56.8
SEX				
Female	45.8	22.5	53.0	58.5
Male	44.8	21.6	52.2	55.0
SIZE OF COMMUNITY				
Big City	39.7	16.0	48.1	50.0
Fringe City	47.5	23.6	55.4	60.0
Medium City	45.8	23.2	52.7	57.2
Smaller Place	47.1	23.9	53.2	58.2
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	21.2	50.9	54.1
No	45.9	22.4	53.3	57.9
COUNSELOR DISCUSSIONS				
Yes	45.4	22.8	54.0	59.2
No	46.1	22.7	51.0	53.7
Don't Remember	40.1	15.8	46.2	45.8
PLANNING VOC-TECH SCHOOL				
Yes	42.0	17.7		
No	46.7	23.5	NOT ASKED	
Undecided	44.7	21.8		
WORK EXPERIENCE				
Regular Job			54.0	58.9
Summer Job			51.9	55.3
Not Worked	NOT ASKED		51.5	56.7
Work Study			50.3	53.9
JOB DECISION				
Yes	45.1	21.6	52.4	56.3
No	45.8	22.9	53.1	57.7

CONTENT DOMAIN 222 -- STEPS IN CAREER PLANNING

CAREER GUIDANCE OBJECTIVE: Each student is competent in solving career problems through planning, decision making, implementing decisions, and evaluation.

The older students performed a little above average, but for the younger students this was the lowest score of all 15 domains -- 23 percent below their all-domain average. The 17 year old pattern conforms to the pattern for other domains; girls a bit better than boys, big city students below others, counselor discussions up a bit, work experience helping, and a slightly higher score for those not in a program of career guidance or education.

Thirteen year olds were presented with what was essentially a single question asking them to rank seven steps in career planning. The domain score is the average of the percentages that placed each step in the right order. The first and the last steps in the correct order were, "Define the problem," and "Revise plans . . . when required." Only 31% and 23%, respectively, ranked these correctly, showing that even the relatively easier steps were not positioned correctly by most students.

It may be that 13 year olds do not understand much about steps in career planning, or just do not understand ranking.

TABLE 6.1.18

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 224 - SATISFACTION FROM WORK

Demographic Category	13 Year Olds		17 Year Olds	
	All Domains	Domain 224	All Domains	Domain 224
CONNECTICUT	45.3	49.6	52.6	34.7
SEX				
Female	45.8	51.5	53.0	35.0
Male	44.8	47.7	52.2	34.3
SIZE OF COMMUNITY				
Big City	39.7	38.9	48.1	32.7
Fringe City	47.5	53.4	55.4	37.6
Medium City	45.8	50.6	52.7	33.5
Smaller Place	47.1	53.2	53.2	34.5
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	44.7	50.9	32.3
No	45.9	51.2	53.3	35.6
COUNSELOR DISCUSSIONS				
Yes	45.4	49.9	54.0	35.7
No	46.1	51.0	51.0	33.2
Don't Remember	40.1	40.5	46.2	30.4
PLANNING VOC-TECH SCHOOL				
Yes	42.0	41.6		
No	46.7	52.2	NOT ASKED	
Undecided	44.7	49.3		
WORK EXPERIENCE				
Regular Job			54.0	36.5
Summer Job			51.9	33.8
Not Worked	NOT ASKED		51.5	32.6
Work Study			50.3	31.2
JOB DECISION				
Yes	45.1	49.3	52.4	34.1
No	45.8	50.5	53.1	35.8

CONTENT DOMAIN 224 -- SATISFACTION DERIVED
FROM WORK

CAREER GUIDANCE OBJECTIVE: Each student understands
that there is a wide range
in the degree and kinds of
satisfaction that are derived
from work.

This is the third of the domains where the 17 year
olds scored lower than the 13 year olds. The items
describe a type of job satisfaction (high income, security,
independence, etc.) and asked which of a set of four jobs
most likely offers that satisfaction. There are five such
questions for the 17 year olds and 12 for the 13 year olds.

Except for one minor difference on one question, all
of the 17 year old test items appear on the 13 year old
test. On those five questions, the average score for seven-
teen year olds is considerably higher than the average for
thirteen year olds. We conclude, therefore, that the remain-
ing items for thirteen year olds were much easier.

The big city 13 year olds had some difficulty with even
these easier questions, since their performance scores are
13 percent below the other 13 year olds.

Although the 13 year old scores in this domain do not
reflect it, there is a general tendency for the more affective
areas to produce lower scores than those based more on cogni-
tive material.

TABLE 6.1.19

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 311 - TRAINING PROGRAMS

Demographic Category	13 Year Olds		17 Year Olds	
	All Domains	Domain 311	All Domains	Domain 311
CONNECTICUT	45.3	31.7	52.6	44.4
SEX				
Female	45.8	31.7	53.0	44.8
Male	44.8	31.8	52.2	43.9
SIZE OF COMMUNITY				
Big City	39.7	27.5	48.1	41.8
Fringe City	47.5	33.2	55.4	46.6
Medium City	45.8	32.5	52.7	44.0
Smaller Place	47.1	32.8	53.2	44.5
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	30.5	50.9	43.4
No	45.9	32.3	53.3	44.8
COUNSELOR DISCUSSIONS				
Yes	45.4	31.7	54.0	45.4
No	46.1	32.6	51.0	43.4
Don't Remember	40.1	27.4	46.2	38.9
PLANNING VOC-TECH SCHOOL				
Yes	42.0	30.4		
No	46.7	33.1	NOT ASKED	
Undecided	44.7	30.4		
WORK EXPERIENCE				
Regular Job			54.0	45.8
Summer Job	NOT ASKED		51.9	43.6
Not Worked			51.5	42.5
Work Study			50.3	45.1
JOB DECISION				
Yes	45.1	31.9	52.4	44.5
No	45.8	31.7	53.1	44.3

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CONTENT DOMAIN 311 -- TRAINING PROGRAMS FOR OCCUPATIONS

CAREER GUIDANCE OBJECTIVE: Each student participates in a training program that is necessary for entrance into his chosen career.

Both age groups scored below their all domain average, the 13 year olds about 14 percent below and the 17 year olds about eight percent below. Both tests used the same questions; students were presented a list of ten jobs and asked to identify the educational requirements of each job, consisting of "Four years or more of college," "Post-secondary schooling," "Apprenticeship," "Vocational-technical school," and "General high-school or less". The big city students scored closer to other students than usual, otherwise the data are quite consistent with the usual pattern.

The data show that all students did reasonably well, or at least much better, identifying those jobs requiring less than high-school graduation, or more than college graduation. Students in general are not aware of those jobs for which they can qualify with high-school or voc-tech school education, or apprenticeship, or post-secondary schooling.

Seventeen year olds performed much better than 13 year olds (13 percent better) showing that at least some of this type of career planning knowledge is being picked up through high-school, but by age seventeen, this type of knowledge is too late for some students. The results for this domain again illustrate the need for earlier career education.

TABLE 6.1.20

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 312 - RELATED ACTIVITIES

| | 13 Year Olds | | 17 Year Olds | |
Demographic Category	All Domains	Domain 312	All Domains	Domain 312
CONNECTICUT	45.3	27.4	52.6	44.3
SEX				
Female	45.8	28.2	53.0	44.9
Male	44.8	26.5	52.2	43.7
SIZE OF COMMUNITY				
Big City	39.7	23.2	48.1	38.6
Fringe City	47.5	29.9	55.4	47.6
Medium City	45.8	27.5	52.7	44.7
Smaller Place	47.1	28.2	53.2	44.9
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	25.5	50.9	43.1
No	45.9	28.2	53.3	44.8
COUNSELOR DISCUSSIONS				
Yes	45.4	26.4	54.0	45.9
No	46.1	28.5	51.0	42.4
Don't Remember	40.1	24.1	49.2	36.7
PLANNING VOC-TECH SCHOOL				
Yes	42.0	24.6		
No	46.7	29.1	NOT ASKED	
Undecided	44.7	26.4		
WORK EXPERIENCE				
Regular Job			54.0	45.5
Summer Job			51.9	43.4
Not Worked	NOT ASKED		51.5	43.5
Work Study			50.3	43.7
JOB DECISION				
Yes	45.1	27.5	52.4	44.5
No	45.8	27.3	53.1	44.1

CONTENT DOMAIN 312 -- ACTIVITIES RELATED TO CAREERS

CAREER GUIDANCE OBJECTIVE: Each student participates
in activities that are
related to and/or expected
in his chosen career.

This domain produced low scores for both age groups,
the 13 year olds scoring 18 percent below their average,
and the 17 year olds scoring eight percent below theirs.
The questions (different for each age) ask the students
to choose the appropriate school activities, school
courses, and community activities that will help prepare
for a specific career.

The spread between the ages is 17 percent, considerably
larger than average. This may well be due to the younger
children not being used to thinking in this vein. The
demographic variation follows the usual pattern with a some-
what larger than usual premium for 17 year olds who have
discussed careers with counselors, and a smaller decrement
for big city students.

TABLE 6.1.21

PERFORMANCE SCORES by DEMOGRAPHIC CATEGORIES
(in percent)

CONTENT DOMAIN 321 - LEVELS/ABILITIES/INTERESTS

Demographic Category	13 Year Olds		17 Year Olds	
	All Domains	Domain 321	All Domains	Domain 321
CONNECTICUT	45.3	34.0	52.6	46.3
SEX				
Female	45.8	33.5	53.0	46.2
Male	44.8	34.7	52.2	46.6
SIZE OF COMMUNITY				
Big City	39.7	26.1	48.1	38.3
Fringe City	47.5	38.1	55.4	49.3
Medium City	45.8	34.0	52.7	47.4
Smaller Place	47.1	36.4	53.2	48.3
CAREER GUIDANCE OR EDUCATION				
Yes	43.5	31.3	50.9	43.7
No	45.9	35.3	53.3	47.5
COUNSELOR DISCUSSIONS				
Yes	45.4	35.2	54.0	47.9
No	46.1	35.0	51.0	45.4
Don't Remember	40.1	27.3	46.2	35.9
PLANNING VOC-TECH SCHOOL				
Yes	42.0	30.3		
No	46.7	36.3	NOT ASKED	
Undecided	44.7	33.1		
WORK EXPERIENCE				
Regular Job			54.0	48.4
Summer Job	NOT ASKED		51.9	45.6
Not Worked			51.5	43.8
Work Study			50.3	44.0
JOB DECISION				
Yes	45.1	33.7	52.4	46.5
No	45.8	35.3	53.1	46.2

CONTENT DOMAIN 321 -- RELATIONSHIP AMONG OCCUPATIONAL
LEVEL, MEASURED VERBAL ABILITY,
MATH ABILITY, AND INTERESTS

CAREER GUIDANCE OBJECTIVE: Each student will apply his
knowledge of the relationship
between his chosen career and
his measured ability and interest.

Both age groups scored lower than average; eleven
percent lower for the 13 year olds, and six percent lower
for the 17 year olds. The test items were the same for
both ages, and consisted of a description of each of five
jobs in terms of the concepts in the domain title. One
element in each description (one "job fact") was wrong
and the student had to identify it.

The big city students scored about ten percent lower
than others, there were no sex differences at all, other-
wise the usual patterns held.

These last three content domains all deal with relation-
ships among job aspects and all produced lower than average
scores. The reader is urged to read the full report for
more details and to consider the impact of these data on
career counseling and education.

BASE LINE

Although the instrument used in this investigation was carefully
developed and tested, no full scale data on performance by various
randomly selected groups of 13 or 17 year old students exists. The
interpretation, therefore, rests on two types of analysis, both of
which are reported on in this section.

The first is to compare various groups within the tested population --
males with females; thirteen year olds with seventeen year olds;
those with work experience with those having no such experience, etc.
This is done among all groups for whom such classificatory data are
available. The second approach is to examine the data for possible
causes for particularly high or particularly low performance scores.
Such examination requires looking at the content, order, and format
of the actual questions, and applying judgment as to whether the
high score (e.g.) is due to a high level of knowledge or to an excep-
tionally easy question. Much of this kind of analysis and interpre-
tation is contained in this section of the report, and, while it
represents our considered judgments, the reader may well have other,
and better, explanations for the data.

A major usefulness of the performance results will be to provide
a basis for comparison with results obtained later. Such comparisons
will show whether there is improvement or not on specific objectives
(content domains) or by specific groups of respondents (e.g. students
from large cities). Thus, trends through time will become measurable
and the impact of specific policy and program decisions can be seen.
A second use of state-wide base line data is for comparisons with
similar data gathered for individual school districts or even specific
schools. If any local educational authorities were to undertake a
local study, they would have norms with which to compare their own
results. This would improve diagnosis and assessment at the local
level.

As described in Section II, there are 39 test exercises that are
either identical or highly similar in the two instruments (for 13
year olds and for 17 year olds). An examination of these items

provides stiong support for using a single test for both ages in the future. Figure 6.2.1 shows a plot of the scores for these items and the regression line fitted to the data. The coefficient of correlation is 0.862, the slope is 1.04, and the Y intercept (17 year olds) is 9.32. This means that, with a high degree of consistency, the 17 year olds scored about ten percentage points higher than did the 13 year olds on the same test items. The scores for the 13 year olds ranged from 11% to 71%; the range for the 17 year olds was from 10% to 90%. The same questions thus provided a wide range of difficulty to both age groups. By picking some additional items from each of the two tests, a single test could be constructed that would assess the knowledge in each of the 15 content domains for both age groups and make direct comparisons possible.

While detailed discussions of each domain, specific test items, and demographic comparisons are presented later in this section, some overall patterns are mentioned here to provide a background for the later material. Figure 6.2.2 shows that for ten of the 15 content domains, the 17 year olds score about ten points higher than the 13 year olds, the same pattern as shown by the scores on identical questions (previous figure). These ten domains are shown by little circles on the figure. But the other five domains present a more interesting pattern. Domains 221 (Identifying alternatives consistent with abilities and interests) and 222 (Steps in career planning) shown as triangles in the figure, have much higher scores for 17 year olds than would be "expected".

Domain 222 was tested by a different method for each age group. The 13 year olds were required to rank seven steps in planning, while 17 year olds had to assess plans by students (see Section III for the actual items). We feel the low scores for 13 year olds may be due, in part, to the structure of the task - ranking - and not entirely to the content.

The other domain, 221, has one identical item in both tests, and on that item (#51 for 13 year olds; #53 for 17 year olds) the 17 year olds score 64.2%; the 13 year olds only 28.5%. This suggests that 17 year olds are really much better at identifying realistic career alternatives than are 13 year olds. Such an ability is one that clearly is closely associated with intellectual and emotional maturation, and may well improve substantially during the four years between 13 and 17.

FIGURE 6.2.1
PERFORMANCE SCORES FOR BOTH AGE GROUPS
FOR 39 IDENTICAL ITEMS

Statistics of
Regression Line

r = 0.862
a = 9.317
b = 1.035
$\bar{x}$ = 36.71
$\bar{v}$ = 47.33

13 Year Old Scores (in percent)
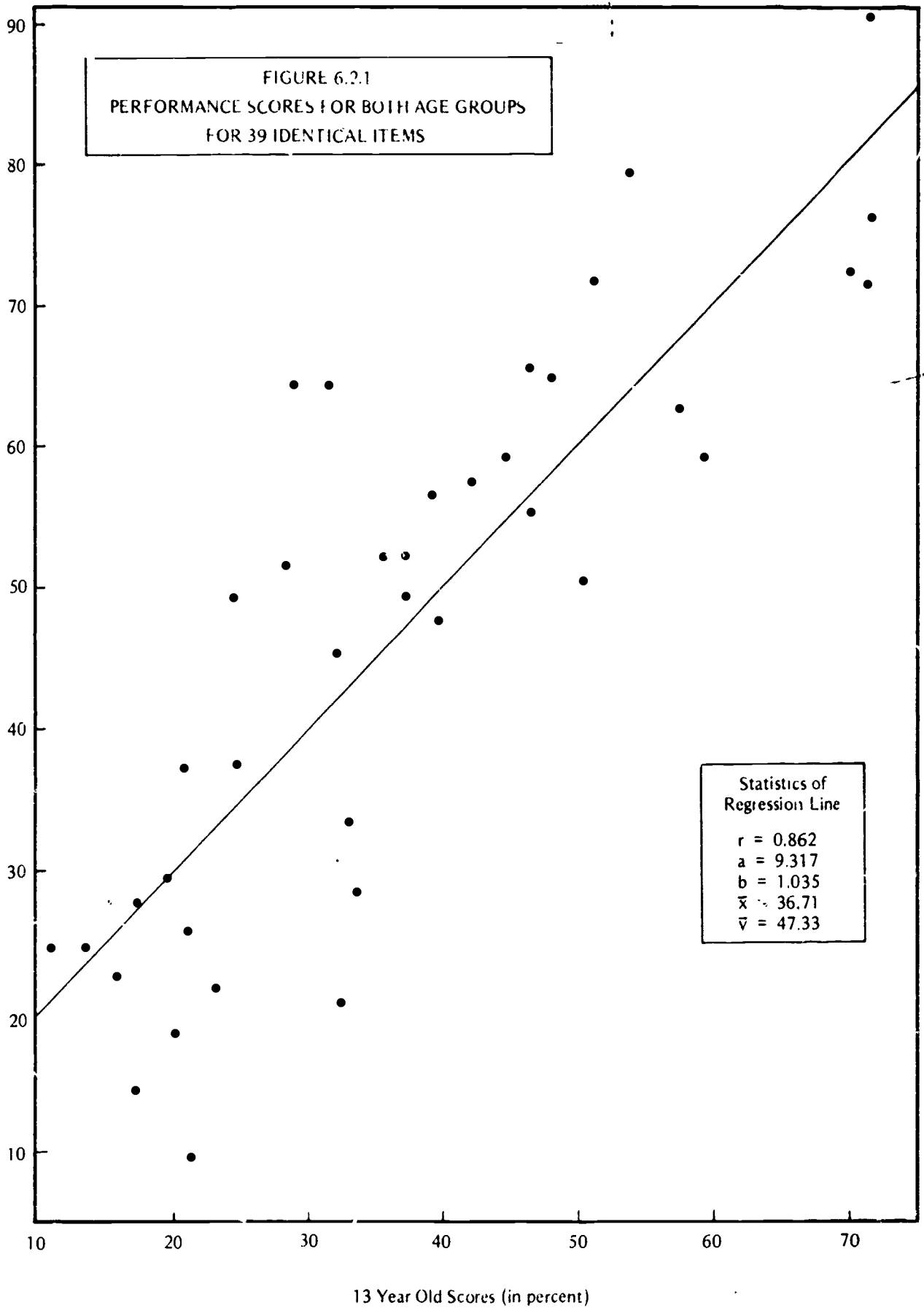
FIGURE 6 2.2

PERFORMANCE SCORES FOR ALL CONTENT DOMAINS
FOR BOTH AGE GROUPS

17 Year Old Scores
(in percent)

(in percent)
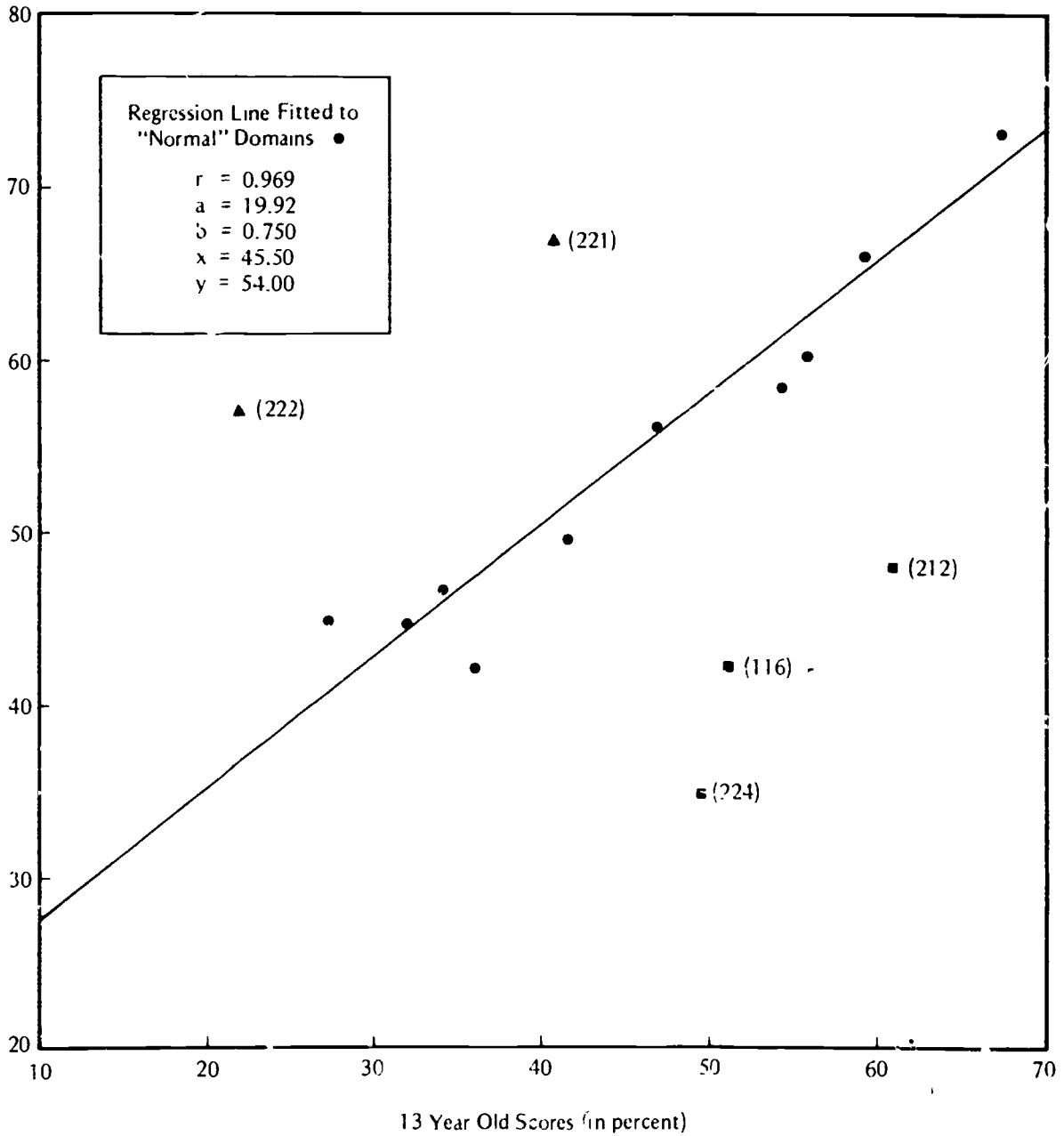
The domains shown by little squares (116, 212, 224) are the only ones
where the 13 year olds had higher absolute scores than did the 17
year olds. Neither domain, 212 nor 116, have any common items, and
224 has only four of its 12 items the same at both age levels, so
we cannot say whether the peculiar pattern represents a real departure
from the usual relation between the ages or is an artifact of the
test design. These issues are discussed at more length in the
following sections for each content domain.

Table 6.2.1 shows the performance scores for all domains combined
for each of the demograph categories for each of the two ages.
There are some interesting patterns. Most obviously, and least
surprising, the 17 year olds did better than the 13 year olds in
all comparable categories, about seven percentage points better.

In each age level, the students from the big cities scored approximately
five points lower than did the rest of the respondents. This may be due,
in part at least, to the fact that any test in written form is
partially a reading test. Previous educational assessment testing
in Connecticut shows that large city 13 and 17 year olds score
about nine percentage points below other students in reading. The
respondents from fringe cities do slightly better than the other
students (about 2.5% better).

In both age groups, girls perform slightly, but consistently, better
than boys. Because of the large sample sizes, these small differences
are almost significant, but the surprising fact is that there is
no general sex effect. For some particular questions dealing with
jobs that are highly sex specific, the differences show in the
expected direction, but on most questions, girls and boys perform
about equally. There may be several reasons for this; the U. S.
work force is now about 40% female, the younger people have a
somewhat different ethos about sex roles, girls are better readers, and
the test was designed not to be sex specific. Whatever the causes,
this is a clear indication that career education and guidance is
for both sexes, and should have similar content for each.

Table 6.2.1

AVERAGE PERFORMANCE SCORES FOR ALL DOMAINS
BY DEMOGRAPHIC CATEGORIES
(in percent)

	Age	
Demographic Category*	13 yrs.	17 yrs.
Connecticut	45.3	52.6
Sex		
Female	45.8	53.0
Male	44.8	52.2
Size of Community		
Big City	39.7	48.1
Fringe City	47.5	55.4
Medium City	45.8	52.7
Smaller Place	47.1	53.2
Career Guidance or Education		
Yes	43.5	50.9
No	45.9	53.3
Counselor Discussions		
Yes	45.4	54.0
No	46.1	51.0
Don't Remember	40.1	46.2
Planning Voc-Tech School		
Yes	42.0	Not
No	46.7	
Undecided	44.7	Asked
Work Experience		
Regular Job		54.0
Summer Job	Not	51.9
Not Worked	Asked	51.5
Work Study		50.3
Job Decision		
Yes	45.1	52.4
No	45.8	53.1

*For full text of the demographic questions see Section III
or Appendix I.

The pattern for 'Career Guidance or Education" shows that students who have been in such programs score slightly lower than those who have not. This may be due to the newness of the programs and may, for the 13 year olds, reflect the fact that more of the big city 13 year olds are in such programs (2>.3%) than the average (22.4%). And since students from large cities do somewhat worse than others, this might account for some of the difference in this demographic variable. However, the same difference between those in or not in a career education program shows up for 17 year olds (in 50.9%; not in 53.3%), and here there is no preponderance of big city students in the programs. This result is somewhat startling, since the test is designed around the content of current programs. Why does exposure to career education programs result in the same performance scores as non-exposure? Internal evidence in the performance on individual questions suggests that what is being measured by the test is what is learned by common out-of-school experience, rather than by exposure to specific curriculum material. Either the content of these courses, or the teaching methods, or the selection of students needs to be changed for this program to have a substantial impact on knowledge levels of Connecticut students.

The next demographic variable categorizes students by whether or not they have had discussions with their guidance counselor in the last 12 months. Only 26.8% of the 13 year olds had had such discussions, and there was no difference in their scores compared to the scores of students who had not seen their counselor. The 64.6% of the 17 year olds, however, who reported discussions with counselors scored 3 percentage points higher than the rest of the 17 year olds. This approaches significance on chi square test (p is approximately 0.15), but does suggest that the 17 year olds who are concerned enough about their careers to discuss them with a guidance counselor do perform slightly better than those who do not. It is not possible to tell whether seeing the counselor improved the test performance for 17 year olds, but at least it suggests that guidance counseling should be part of a total program of career education.

The last demographic variable on Table 6.2.1 classifies the respondents by whether or not they have decided on the kind of job they want to go into. Performance levels are not affected by this variable, but it is interesting to note that almost the same percentage of 13 year olds as 17 year olds said that they had decided (13 year-olds 62.5%; 17 year-olds 64.7%).

There were two demographic questions that were not common to both age groups. The 13 year olds were asked whether or not they planned to attend a vocational-technical high school. The response frequencies are interesting in themselves. About half (50.2%) said "No"; about an eighth (12.9%) said "Yes"; and about a third were undecided. Since currently less than a tenth of the high school capacity is in voc-tech schools, it is abundantly clear that the demand for such education exceeds the supply. Students who plan to go to voc-tech high schools scored somewhat lower (by 4.7%) than those who did not, probably reflecting the higher general performance levels of the college bound student.

The 17 year old students were asked if they had current jobs or had ever worked. The exact question was:

4. We want to know if you have had any experience working for money outside your home. Mark the statement below that best describes you.

1 ____ I now have a regular job that I work at at least one day or evening a week.

2 ____ I have worked during the summer or some time during the last twelve months.

3 ____ I have not worked during the last twelve months.

4 ____ I have been in a work-study program in school.

Almost half (45.1%) gave answer 1, and they scored somewhat better (2.4%) than the rest.

Most of the patterns of responses described above for the seven demographic variables are reflected in most of the specific content domains discussed in the rest of this section. Any departures from these "standard patterns" are discussed in the analysis for each domain.

CONTENT DOMAIN ANALYSIS

The following 15 sections are all organized the same way. First, a
figure (6.3.1) containing the questions for the first domain from the
13 year old test; next the questions for the 17 year old test (Figure
6.3.2); then a table (Table 6.3.01) showing the results for 13 year olds;
then another table for 17 year olds (6.c.02); then a graph of the data
(Figure 6.3.3), then explanatory and interpretative text.

This organization continues, with two tables and three figures for each
content domain. In the figure containing the questions (Figures 6.3.1
and 6.3.2 for the first domain) the correct answer is indicated by a
circle around the answer number, and the percent response, for wrong
as well as right answers is written in.

13 Year Olds

114 JOB SATISFACTION

Working in a large hotel, restaurant, or institution, the Kitchen Helper
contributes to the work of a number of specialty cooks, as for example,
the fry cook, roast cook, salad girl, and others.

Kitchen Helpers bring supplies from the storeroom, and clean and prepare
vegetables and fruits for cooking or serving, and keep work areas and
counters clean and uncluttered.

What kind of job satisfaction might a Kitchen Helper expect from his job?

> CHECK ALL ITEMS THAT USUALLY APPLY IN THE "YES" COLUMN AND
> ALL ITEMS THAT DO NOT APPLY IN THE "NO" COLUMN.

		YES	NO
1.	He will receive the recognition of his fellow workers.	1 73.5	② 25.5
2.	He will have independence on the job.	1 47.4	② 51.8
3.	He will be a member of a production team.	① 64.0	2 35.1
4.	He will be in a position to learn many of the ins-and-outs of the food service industry.	① 86.5	2 13.1
5.	With talent and application he will be in line for a promotion.	① 69.8	2 29.3

17 Year Olds

114   JOB SATISFACTION

The occupation of <u>Clerk-typist</u> is regarded favorably by many persons for the following reasons:

> CHECK ALL ITEMS THAT USUALLY APPLY IN THE "YES" COLUMN AND ALL ITEMS THAT DO NOT APPLY IN THE "NO" COLUMN.

		<u>YES</u>	<u>NO</u>
1.	The required tasks are so well organized that instructions are usually unnecessary.	1 42.6	② 55.1
2.	The job is a stepping-stone to higher paying clerical positions.	① 83.1	2 15.7
3.	Work assignments vary from day to day.	① 64.7	2 33.6
4.	The pay is adequate enough to support a family of two adults and two children.	1 28.2	② 68.9
5.	The job has maximum security.	1 41.1	② 55.3
6.	There are many chances for creative self expression.	1 24.2	② 73.6
7.	The responsibilities include decision making in general administrative policies.	1 36.2	② 60.9

TABLE 6.3.01 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 114 -- JOB SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		1	2	3	4	5
CONNECTICUT	59.5	25.5	51.8	64.0	86.5	69.9
SEX						
Female	59.4	25.5	48.2	65.4	88.2	69.7
Male	59.6	25.2	55.6	62.7	84.8	69.9
SIZE OF COMMUNITY						
Big City	55.0	19.5	42.0	56.9	86.1	70.6
Fringe City	61.4	30.1	55.8	65.9	86.3	68.8
Medium City	60.4	26.0	53.8	63.3	86.6	72.4
Smaller Place	60.5	25.5	53.9	68.1	87.0	68.0
CAREER GUIDANCE OR EDUCATION						
Yes	59.1	22.8	51.0	63.7	63.5	69.4
No	59.7	26.4	52.0	64.5	86.1	69.7
COUNSELOR DISCUSSIONS						
Yes	59.7	23.3	50.0	66.8	86.4	71.9
No	59.9	26.4	53.5	63.8	87.1	68.9
Don't Remember	57.3	26.2	47.0	59.4	84.1	69.7
PLANNING VOC-TECH SCHOOL						
Yes	57.6	19.2	47.9	62.7	87.5	70.6
No	60.8	28.2	55.8	63.7	86.8	69.6
Undecided	58.6	24.7	47.6	64.7	86.1	69.7
JOB DECISION						
Yes	59.8	25.3	51.7	65.2	86.4	70.5
No	59.2	25.9	52.4	62.4	86.9	68.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.02 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 114 -- JOB SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	1	2	3	4	5	6	7
				QUESTION NUMBER (SEE PRECEEDING FIGURE)				
CONNECTICUT	65.9	55.1	83.1	64.7	68.9	55.3	73.5	60.9
SEX								
Female	66.6	55.6	85.2	67.3	73.0	51.2	73.7	60.0
Male	65.2	54.6	80.7	61.7	64.4	59.8	73.4	61.8
SIZE OF COMMUNITY								
Big City	61.2	55.3	84.4	70.9	62.0	46.3	59.8	50.0
Fringe City	65.1	45.8	81.2	57.2	71.2	59.4	80.0	67.9
Medium City	67.5	62.5	83.4	67.4	68.1	56.1	73.8	60.9
Smaller Place	67.7	56.4	83.5	64.4	72.3	57.4	77.2	62.4
CAREER GUIDANCE OR EDUCATION								
Yes	64.8	53.4	84.1	68.8	68.3	53.2	69.6	56.2
No	66.4	55.7	82.7	63.1	69.1	56.1	75.1	62.8
COUNSELOR DISCUSSIONS								
Yes	67.2	55.0	83.8	64.5	71.8	56.8	76.4	61.8
No	64.2	54.7	83.3	64.3	63.7	53.9	69.8	59.7
Don't Remember	61.3	58.3	75.4	66.9	61.6	46.1	62.0	56.8
WORK EXPERIENCE								
Regular Job	66.7	56.8	81.7	63.5	68.8	57.5	75.4	63.5
Summer Job	65.5	55.5	83.0	65.0	67.4	55.9	73.0	58.4
Not Worked	64.8	52.0	85.9	65.6	72.2	47.8	71.9	58.1
Work Study	67.2	46.8	86.2	70.9	71.9	56.9	71.7	66.0
JOB DECISION								
Yes	65.9	55.1	84.7	65.5	69.1	54.6	72.6	59.9
No	66.0	55.2	80.1	63.1	68.4	56.9	75.4	63.0

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.03

DEVIATION FROM AVERAGE PERFORMANCE SCORES

BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 114   JOB SATISFACTION
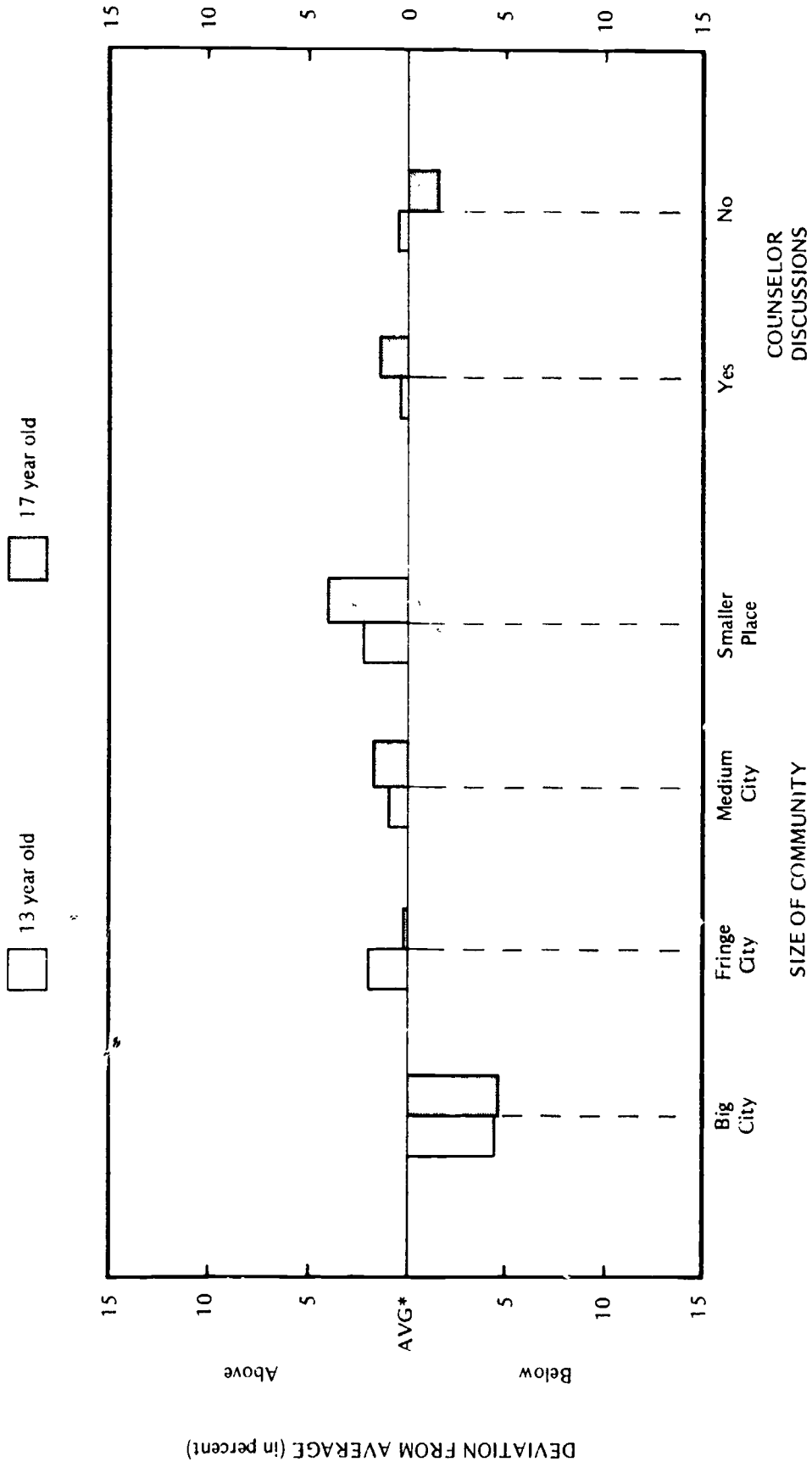
*AVERAGE SCORES: 13 yr. olds — 59.5%;   17 yr. olds — 65.9%

CONTENT DOMAIN 114. JOB SATISFACTION

Overall Content Domain

Overall performance for this content domain was on the high side,
averaging 62.7%, with 13 year olds scoring 6.4% lower than 17 year
olds. Average scores are somewhat misleading since the item scores
showed a large spread, particularly for 13 year olds, where the
item scores ranged from 25% to 87%. For 17 year olds, the spread
was only 28%. In general, it can be concluded that both 13 and 17
year olds were quite familiar with those elements of the jobs of
kitchen helper and clerk typist, respectively, which provide job
satisfaction.

Demographic Variations

Average performance patterns for this domain, for both age groups,
were generally similar to those for the test as a whole, within the
demographic variables. Scores for the domain were quite uniform
for both ages across all demographic variables; the largest deviation
was for SOC 1, which scored only 4.5% - 4.7% lower than the state
average.

Individu . Questions

Most of the questions of this domain show performance patterns for
both ages similar to those of the domain as a whole within each of
the demographic variables. For 13 year olds, questions 1 and 2
deviated somewhat from these patterns. Big City students scored
unusually lower than the Connecticut average for these questions
(and average for the last two questions) perhaps reflecting the
fact that these students see more potential in employment as a
kitchen helper than do others. In question 1, students planning
to attend Voc-Tech school also did poorly, which may of course
reflect the fact that 32% of all tested students who plan to attend
Voc-Tech school are in SOC 1. It is not clear why, on question 2,
girls scored unusually lower than boys.

For 17 year olds, questions 1, 3, 5, 6 and 7 varied somewhat from
the pattern. In question 1, SOC 2 students who normally perform
better than the state average, scored 10% below average. SOC 1
students scored unusually high on question 3, and unusually low on
questions 6 and 7. Connecticut girls, more than boys, apparently

feel that the job of clerk-typist (which many of them will obviously go into upon graduation) offers "maximum security." On this question girls scored 8.6% lower than boys.

None of the other demographic variables, for both ages, showed any significant effect on performance.

Exceptionally Hard or Easy Questions

Question 1 falls into the "hard" category for 13 year olds, since more students selected the wrong answers than the right answer. Since with the exception of the SOC category, scores for this question are quite uniform across all the demographic variables, it would appear that students are just not familiar with the tested aspect of the job of kitchen helper. However, more than 86% of the 13's answered question 4 correctly, and 83% of the 17's got question 2 correct, making both of these easy questions. The answers to both questions indicate that students in general recognize these jobs as entry level in their fields, from which one can expect to move up to a better job.

13 Year Olds

115 OCCUPATIONAL LEVELS, OCCUPATIONAL FIELDS, WORK EMPHASIS

In each of the items below, you are to determine what is being described:
an Occupational Level, an Occupational Field, or a Work Role Emphasis
(people, data, things). In one of the three spaces after each item,
mark an "X" in the column you select, as shown in the example.

	LEVEL	FIELD	EMPHASIS
EXAMPLE:			
People who work with things	___	___	X
6. People who are skilled	①41.8	2 40.6	3 16.4
7. Persons who work in Construction	1 17.8	②52.0	3 29.1
8. Persons who are semi-skilled	①60.5	2 20.5	3 17.8
9. Persons who work with Creative Arts	1 13.7	②32.6	3 52.7
10. Persons who work in Manufacturing	1 19.3	②47.7	3 32.0

17 Year Olds

115 OCCUPATIO.,AL LEVELS, OCCUPATIONAL FIELDS, WORK EMPHASIS

In each of the items below, you are to determine what is being described:
an Occupational Level, an Occupational Field, or a Work Role Emphasis
(people, data, things). In one of the three spaces after each item,
mark an "X" in the column you select, as shown in the example.

	LEVEL	FIELD	EMPHASIS
EXAMPLE:			
Persons who work in Health, Family & Public Welfare	___	X__	___
8. Persons who are highly skilled at their work	① 57.8	2 _16.6	3 _25.1
9. Persons who are employed in Public Service	1 _17.6	② 62.9	3 _18.9
10. Persons who work with people	1 _19.4	2 _34.3	③ 45.6
11. Persons who work in Communications and Media	1 _14.8	② 61.6	3 _22.8
12. Persons who are professional	① 52.8	2 _23.1	3 _23.4

TABLE 6.3.03 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS CONTENT DOMAIN 115 -- LEVELS, FIELDS, EMPHASIS (IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		6	7	8	9	1D
CONNECTICUT	46.9	41.8	52.0	60.5	32.6	47.7
SEX						
Female	48.6	43.3	52.4	64.5	33.3	49.4
Male	45.3	40.2	51.5	56.6	32.0	46.0
SIZE OF COMMUNITY						
Big City	45.0	40.7	48.9	60.0	31.3	44.1
Fringe City	49.0	43.9	53.4	63.0	34.0	50.7
Medium City	44.9	39.6	50.3	57.5	29.7	47.3
Smaller Place	48.3	42.7	54.4	61.5	34.8	48.2
CAREER GUIDANCE OR EDUCATION						
Yes	46.5	40.7	51.2	57.1	33.8	49.8
No	47.2	42.2	52.5	61.3	32.3	47.6
COUNSELOR DISCUSSIONS						
Yes	46.7	39.3	52.1	60.9	32.3	48.7
No	47.2	42.4	52.4	60.9	32.6	47.5
Don't Remember	46.5	44.5	52.3	56.1	32.3	47.3
PLANNING VOC-TECH SCHOOL						
Yes	43.8	38.5	53.9	54.6	26.7	45.1
No	47.0	41.6	50.6	61.2	33.2	48.2
Undecided	48.1	42.8	53.7	61.7	33.7	48.6
JOB DECISION						
Yes	46.9	42.3	53.1	58.3	32.3	48.3
No	47.1	40.8	50.9	63.8	32.7	47.3

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.04 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS CONTENT DOMAIN 115 -- LEVELS, FIELDS, EMPHASIS (IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEDING FIGURE)				
		8	9	10	11	12
CONNECTICUT	56.1	57.8	62.9	45.6	61.6	52.8
SEX						
Female	57.7	59.8	64.5	47.5	62.9	53.7
Male	54.4	55.5	61.2	43.4	60.2	51.9
SIZE OF COMMUNITY						
Big City	48.8	52.5	55.6	37.0	53.8	44.9
Fringe City	60.5	62.1	65.3	48.9	67.1	59.3
Medium City	56.5	58.0	64.6	46.3	61.4	52.3
Smaller Place	57.0	57.4	64.3	47.9	62.5	53.0
CAREER GUIDANCE OR EDUCATION						
Yes	53.6	54.9	61.5	42.1	58.8	50.8
No	57.J	59.1	63.6	47.1	63.0	53.5
COUNSELOR DISCUSSIONS						
Yes	57.4	59.6	64.4	46.1	62.5	54.;
No	54.5	54.8	60.4	45.8	61.6	49.8
Don't Remember	50.3	51.9	58.8	39.0	53.6	48.0
WORK EXPERIENCE						
Regular Job	58.4	59.9	64.4	49.3	63.5	54.9
Summer Job	55.3	57.5	63.7	43.0	60.9	51.3
Not Worked	53.3	53.0	62.0	42.0	59.5	50.0
Work Study	50.1	53.7	46.0	40.0	58.9	52.0
JOB DECISION						
Yes	56.1	59.4	63.5	44.8	59.9	52.8
No	56.3	54.8	62.0	47.0	64.8	53.0

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.06

DEVIATION FROM AVERAGE PERFORMANCE SCORES
BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 115 — LEVELS, FIELDS, EMPHASIS

☐ 13 year old

☐ 17 year old

DEVIATION FROM AVERAGE (in percent)

Above

Below

AVG*

15 10 5   5 10 15

Big
City

Fringe
City

Medium
City

Smaller
Place

SIZE OF COMMUNITY

Yes

No

COUNSELOR
DISCUSSIONS

*AVERAGE SCORES: 13 yr. olds — 46.9%;   17 yr. olds — 56.1%

100

CONTENT DOMAIN 115. LEVELS, FIELDS, AND EMPHASIS

Overall Content Domain

Overall performance for this content domain was medium, averaging
51.5%. Thirteen year olds scored 9.2% lower than 17's. Item scores
at both ages were moderately clustered; scores for 13's had a
range of 28%, scores for 17's had a range of only 17%.

Demographic Variations

Average performance patterns for this domain, for both age groups
were generally similar to those for the test as a whole, within
the demographic variables. Scores for the domain were again quite
uniform for both ages; the largest deviation was for SOC 1. For
13's, the SOC 1 score was only 1.9% lower than the state average;
for 17's, SOC 1 scored 7.3% lower. All other scores clustered
tightly around the average, again showing little variation as a
function of demographic variables.

Although it would seem that knowledge about occupational levels,
occupational fields, and work emphasis would be more readily
learned in career education course work than in out of school
experiences, the data do not indicate that students with exposure
to career guidance or education did better than those who were
not in such programs; in fact they seemed to score somewhat lower.
However, all students did reasonably well for the domain as a
whole; examination of the test suggests that the instructions and
examples alone were in effect, a teaching device, and may account
for this lack of difference.

Individual Questions

Each of the questions of the content domain show performance
patterns similar to those of the domain as a whole within each
of the demographic variables.

Exceptionally Hard or Easy Questions

None of the questions for this domain fell into the "hard" or
"easy" category. For both ages, scores ranged from 32% to 63%.

13 Year Olds

116 OCCUPATIONAL TRENDS

Below is a list of occupations. For each occupation place an "X" in
one of the columns at the right to show whether, during the next ten
years, that occupation will need MORE workers, the SAME number of
workers, or FEWER workers, than are needed now.

		MORE	SAME	FEWER
EXAMPLES:				
	Registered nurse	X	___	___
	Auto mechanic	___	X	___
11.	Super-market manager	1 34.6	②52.8	3 12.1
12.	Able seaman	1 33.6	2 33.0	③32.5
13.	Dental Assistant	①49.6	2 40.6	3 9.1
14.	Electrical engineer	①65.3	2 26.9	3 7.2
15.	Business machine repairman	①55.3	2 31.9	3 12.4

17 Year Olds

116 OCCUPATIONAL TRENDS

Below is a list of occupations. For each occupation, place an "X" in one of the columns at the right to show whether, during the next ten years, that occupation will need a GREATER percentage of workers, a SMALLER percentage of workers, or about the SAME percentage of workers, than are needed now.

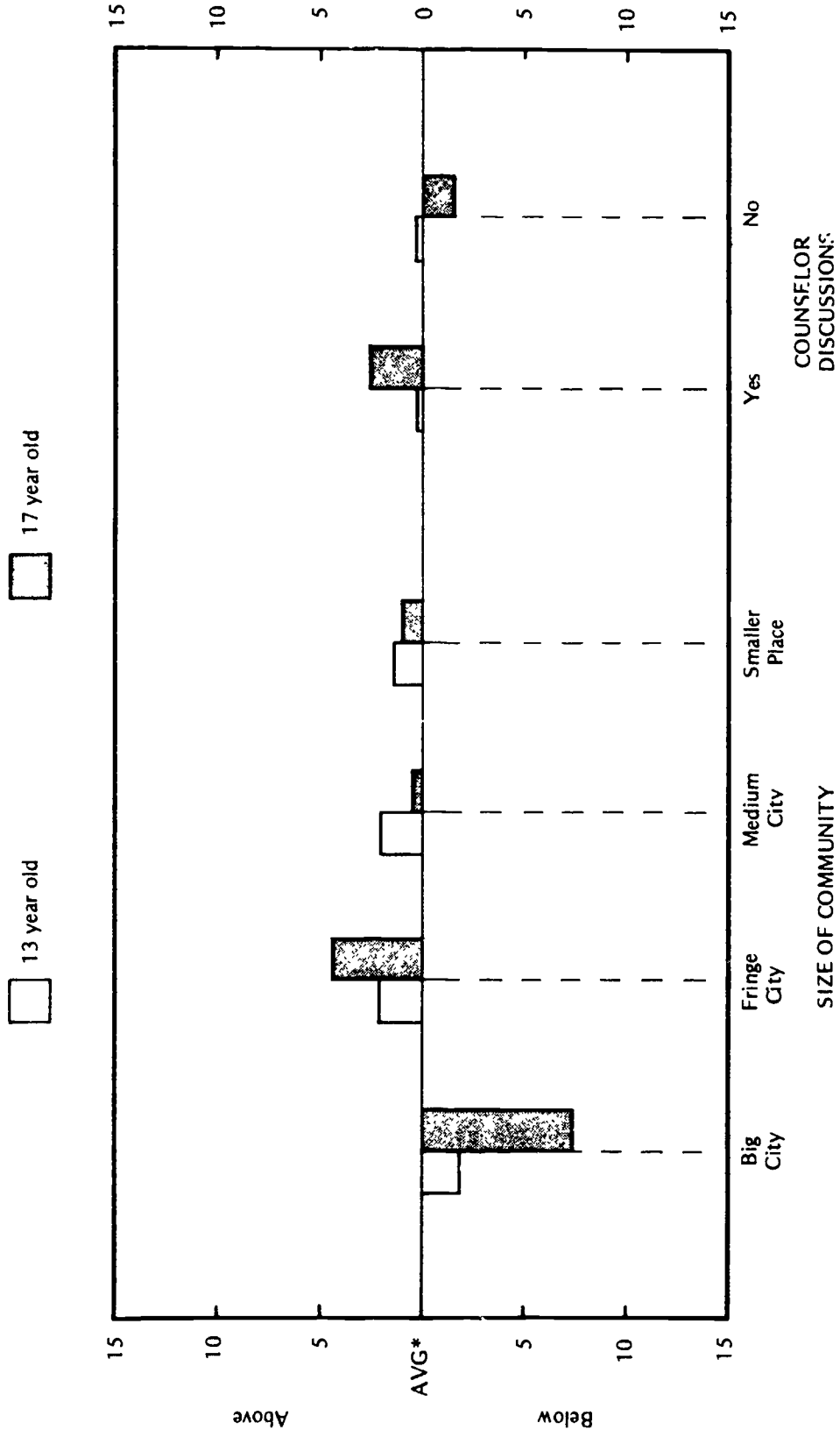|		GREATER %	SAME %	SMALLER %
EXAMPLES:				
	Accountants	_____	_____	".."
	Dental hygienists	X	_____	_____
13.	Mathematicians	①45.7	2 33.6	3 20.1
14.	Actors and actresses	1 13.2	2 61.7	③24.6
15.	Foresters	①44.0	2 22.9	3 31.9
16.	Office machine operators	1 50.8	②25.6	3 23.0
17.	Elementary teachers	1 35.0	②29.8	3 34.5
18.	Computer programmers	①84.7	2 9.4	3 5.4

TABLE 6.3.05 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 116 -- OCCUPATIONAL TRENDS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		11	12	13	14	15
CONNECTICUT	51.1	52.8	32.5	49.7	65.3	55.3
SEX						
Female	50.9	56.3	33.5	49.8	63.1	51.6
Male	51.4	49.2	31.4	49.3	67.8	59.2
SIZE OF COMMUNITY						
Big City	49.0	51.1	30.0	50.5	58.4	55.0
Fringe City	50.2	54.4	31.3	48.3	65.1	52.1
Medium City	49.6	50.5	31.8	48.8	63.3	53.5
Smaller Place	54.6	54.8	35.8	50.9	72.1	59.6
CAREER GUIDANCE OR EDUCATION						
Yes	50.5	52.2	30.4	49.7	63.7	56.6
No	51.3	53.1	33.0	49.7	65.8	54.8
COUNSELOR DISCUSSIONS						
Yes	51.0	51.4	31.1	53.0	64.3	55.4
No	51.5	53.8	33.6	47.7	66.6	55.7
Don't Remember	48.9	50.8	28.6	52.1	60.4	52.8
PLANNING VOC-TECH SCHOOL						
Yes	49.2	46.8	29.1	51.0	64.5	54.5
No	52.0	54.1	34.4	50.2	55.4	56.1
Undecided	50.9	54.4	31.3	49.0	65.6	54.3
JOB DECISION						
Yes	50.8	51.3	31.8	49.2	65.4	56.2
No	51.8	55.6	33.9	50.1	65.7	53.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.06 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLOS
CONTENT DOMAIN 116 -- OCCUPATIONAL TRENDS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)					
		13	14	15	16	17	18
CONNECTICUT	42.4	45.7	24.5	44.0	25.6	29.8	84.8
SEX							
Female	41.6	44.3	26.2	42.2	23.2	29.9	84.1
Male	43.1	47.3	22.7	45.8	28.2	29.5	85.4
SIZE OF COMMUNITY							
Big City	40.2	47.7	20.7	37.0	22.0	34.9	79.1
Fringe City	43.6	41.9	28.2	46.5	25.5	32.2	87.6
Medium City	41.8	46.5	21.7	42.7	28.1	26.5	85.6
Smaller Place	43.2	46.9	26.6	47.8	25.8	27.0	85.4
CAREER GUIDANCE OR EDUCATION							
Yes	41.5	43.9	23.6	42.9	23.4	31.7	83.8
No	42.7	46.2	25.0	44.6	26.4	29.1	85.1
COUNSELOR DISCUSSIONS							
Yes	42.8	47.3	23.9	44.7	25.8	29.4	85.9
No	41.9	43.2	25.2	43.7	25.5	29.5	84.3
Don't Remember	39.7	40.5	27.5	38.5	23.6	33.9	74.1
WORK EXPERIENCE							
Regular Job	42.6	47.6	22.7	44.8	26.1	27.6	86.6
Summer Job	42.3	46.2	24.9	44.0	25.4	30.4	83.1
Not Worked	42.8	44.6	29.7	43.0	26.3	29.1	84.1
Work Study	40.9	30.9	21.1	42.6	24.0	42.2	84.8
JOB DECISION							
Yes	42.4	46.0	24.1	44.8	25.3	30.3	83.8
No	42.3	44.9	25.4	42.5	25.8	28.8	86.3

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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FIGURE 6.3.09

DEVIATION FROM AVERAGE PERFORMANCE SCORES
BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 116 — OCCUPATIONAL TRENDS
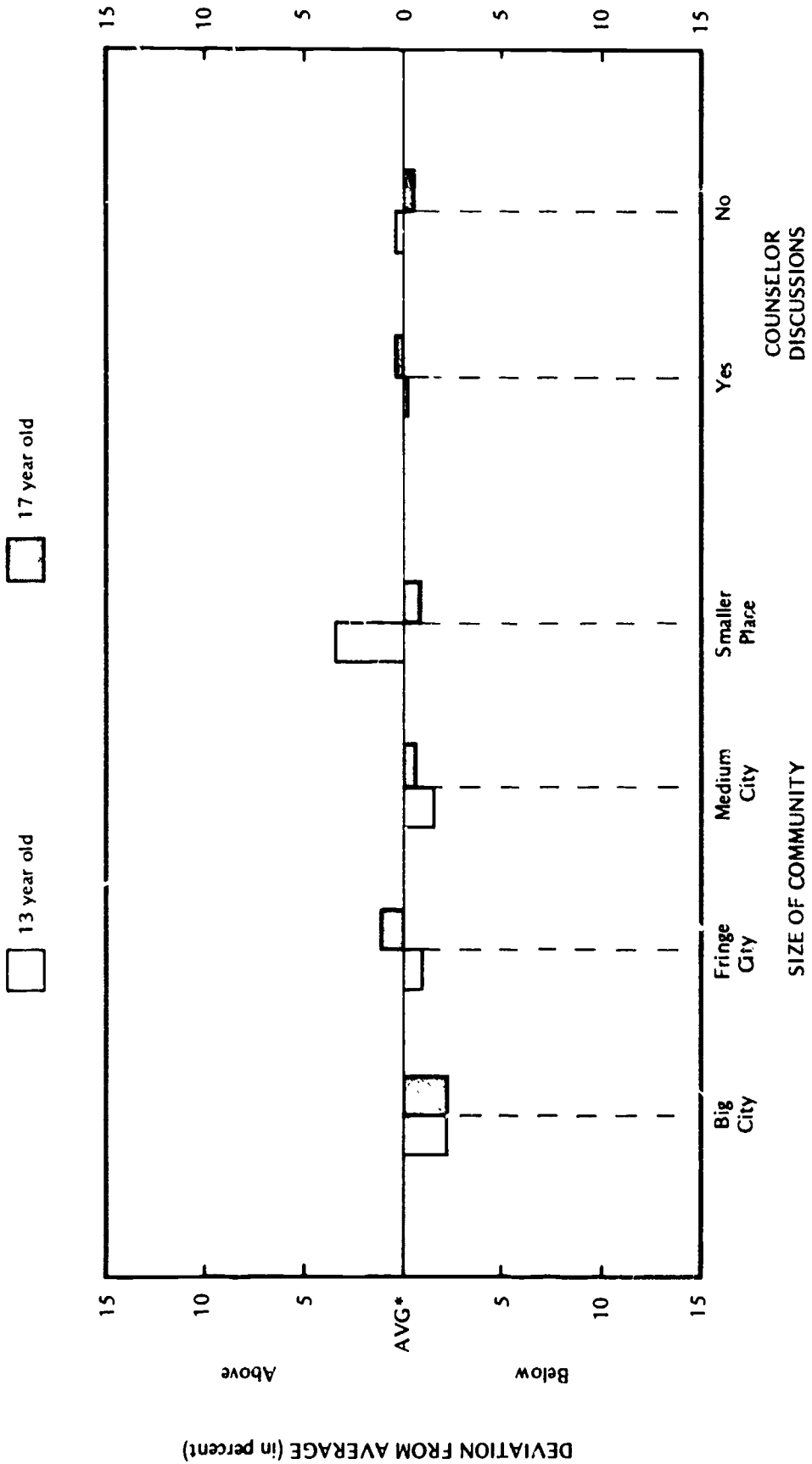
*AVERAGE SCORES: 13 yr. olds — 51.1%;   17 yr. olds — 42.4%

CONTENT DOMAIN 116. OCCUPATIONAL TRENDS

Overall Content Domain

Overall performance was medium, averaging 46.8% for all students. This domain was one of three in which 13 year olds performed better than 17 year olds. The average score for 13 year olds was 51.1%, for seventeen's the average was 42.4%. Neither age group had tightly clustered item scores, but the 13 year old scores were somewhat more uniform, showing a range of 32.8% compared to a range of 60.1% for seventeens. It is at least apparent that for the occupations tested, 13 year olds were more aware of the future labor market than were 17 year olds.

Demographic Variations

Although average performance patterns, for both ages, were generally similar to those for the test as a whole, within the demographic variables, SOC 1 students did somewhat better than usual, falling only 2.1% to 2.2% below average for both ages. Scores for the domain, for both ages, were quite uniform across all the demographic variables, again indicating that exposure to career guidance or education, or counselor discussions, or various work experience, had little or no effect on results.

Individual Questions

With only a few exceptions, all of the questions of the content domain show performance patterns similar to those of the domain as a whole within each of the demographic variables. Amongst 13 year olds, girls scored 7% higher than boys in predicting the future job market for super market managers (question 11) and close to 8% lower than boys in a similar question about business machine repairmen (question 15). It is at least conceivable that girls, whom one would expect to have greater familiarity with supermarkets, are more aware of the trend to larger and fewer supermarkets than are boys. Similarly, boys might be expected to be more familiar with any type of mechanical repair service occupation than are girls. For the 17 year olds, students in SOC 1 were unexpectedly more aware of the fact that there is an unchanging need for elementary school teachers (question 17). SOC 1 students scored 5.1% higher than average for this question. Seventeen year olds in work-study programs also did unusually well on question 17 (12.4% better than average) but the overall pattern for this content domain within the work experience variable did not deviate significantly.

Exceptionally Hard or Easy Questions

The unexpected difference in scores between 13 and 17 year olds is probably best explained by the fact that out of six questions on the 17 year old test, three fell into the "hard" category, whereas there was only one "hard" question for thirteens. Seventeen year olds were unable to predict at all accurately the future market trends of actors and actresses, office machine operators, and elementary teachers. However, 17 year olds had little difficulty in assessing the future market for computer programmers. Approximately 85% are aware of the increasing emphasis on computers and computer programmers in our society. For thirteen year olds, nearly two-thirds were unable to predict the future market needs for able seamen. This may be due to a lack of understanding of the term "able seaman" as well as having no knowledge of maritime labor trends.

13 Year Olds

117 OCCUPATIONAL LEVELS AND EDUCATION

For each of the occupations listed below, place an "X" in the column
at the right that shows the level of education usually expected to
enter the occupation.

USUALLY EXPECTED LEVEL OF EDUCATION

*(Note: High School includes Connecticut
Vocational-Technical Schools)

OCCUPATION	At least 4 years of college	Schooling after High School*	High School* Graduation Only	Less than High School* Graduation
EXAMPLES:				
Soil conservationist	X	___	___	___
Rotary driller	___	___	___	X
16. Secretary	1 27.7	2 50.1	③ 19.6	4 2.0
17. Meatcutter	1 2.7	2 12.1	3 25.4	④ 58.5
18. Electronics technician	1 73.4	② 20.6	3 4.3	4 1.0
19. Electrical engineer	① 70.6	2 23.0	3 4.0	4 1.0
20. Roughneck (oil field)	1 13.6	2 30.3	3 30.2	④ 24.4
21. Draftsman	1 38.1	2 31.0	③ 21.3	4 9.0

17 Year Olds

117 OCCUPATIONAL LEVELS AND EDUCATION

For each of the occupations listed below, place an "X" in the column
at the right that shows the level of education usually expected to
enter the occupation.

USUALLY EXPECTED LEVEL OF EDUCATION

*(Note: High School includes Connecticut
Vocational-Technical Schools)

OCCUPATION	At least 4 years of college	Schooling after High School*	High School* Graduation Only	Less than High School* Graduation
EXAMPLES:				
Soil conservationist	X	___	___	___
Rotary driller	___	___	___	X
19. Secretary	1 6.1	2 62.5	③ 29.3	4 1.4
20. Meatcutter	1 1.3	2 17.2	3 21.6	④ 59.1
21. Electronics technician	1 58.5	② 37.0	3 3.6	4 0.2
22. Electrical engineer	① 76.4	2 20.1	3 2.4	4 0.2
23. Roughneck (oil field)	1 6.4	2 22.6	3 28.4	④ 40.9
24. Draftsman	1 37.9	2 50.3	③ 9.6	4 1.4

TABLE 6.3.07 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 117 -- LEVELS AND EDUCATION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)					
		16	17	18	19	20	21
CONNECTICUT	35.8	19.6	58.5	20.7	70.6	24.4	21.3
SEX							
Female	36.0	17.2	61.1	21.4	71.0	19.9	25.4
Male	35.7	22.1	56.0	20.0	70.1	29.2	17.1
SIZE OF COMMUNITY							
Big City	33.2	18.7	54.9	18.5	62.1	22.0	23.1
Fringe City	37.2	20.8	59.4	21.4	75.2	25.8	20.4
Medium City	36.0	17.7	58.7	20.2	70.4	27.0	22.3
Smaller Place	36.5	20.8	60.1	22.0	73.2	22.8	20.0
CAREER GUIDANCE OR EDUCATION							
Yes	35.3	23.3	55.7	20.0	67.8	26.0	19.3
No	35.9	18.3	59.2	21.1	71.4	24.1	21.5
COUNSELOR DISCUSSICNS							
Yes	36.5	23.0	58.5	20.6	69.6	24.?	22.2
No	36.2	17.9	60.3	21.5	72.0	25.2	20.4
Don't Remember	31.4	20.9	47.1	17.1	64.4	18.3	20.9
PLANNING VOC-TECH SCHOOL							
Yes	34.4	20.3	55.1	23.6	62.4	24.2	20.7
No	36.4	20.7	58.4	22.0	71.0	26.6	19.8
Undecided	35.7	17.8	60.2	18.3	73.0	21.6	23.4
JOB DECISION							
Yes	35.6	19.8	58.2	21.9	70.0	24.7	19.1
No	36.1	19.3	59.2	18.6	71.5	24.3	23.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.08 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS CONTENT DOMAIN 117 -- LEVELS AND EDUCATION (IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)					
		19	20	21	22	23	24
CONNECTICUT	42.1	29.3	59.1	37.0	76.4	40.9	9.6
SEX							
Female	41.5	27.5	61.6	36.2	77.0	37.2	9.7
Male	42.7	31.4	56.7	37.9	75.6	45.0	9.6
SIZE OF COMMUNITY							
Big City	40.7	27.3	64.8	33.6	74.6	31.0	12.8
Fringe City	45.5	33.4	61.2	44.9	82.8	46.2	4.7
Medium City	41.8	28.3	58.6	35.7	72.4	42.0	13.6
Smaller Place	40.2	28.1	53.8	33.6	75.6	42.2	8.1
CAREER GUIDANCE OR EDUCATION							
Yes	40.8	29.2	58.0	34.8	74.6	38.1	10.4
No	42.6	29.5	59.7	37.8	77.1	42.0	9.4
COUNSELOR DISCUSSIONS							
Yes	42.4	29.4	59.7	37.2	79.0	41.0	8.4
No	42.4	29.5	59.5	37.8	72.9	43.0	11.7
Don't Remember	37.5	29.5	53.0	31.2	66.9	30.3	13.9
WORK EXPERIENCE							
Regular Job	42.3	29.4	59.1	37.9	77.4	40.4	9.6
Summer Job	42.0	27.1	60.2	36.3	74.9	43.9	9.8
Not Worked	42.0	33.8	58.8	33.6	77.9	37.5	10.6
Work Study	42.3	34.6	58.4	41.3	76.2	34.4	8.7
JOB DECISION							
Yes	41.7	29.4	58.2	35.7	76.6	40.2	10.2
No	42.7	29.2	61.0	39.1	76.2	41.9	8.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.12

DEVIATION FROM AVERAGE PERFORMANCE SCORES

BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 117 -- LEVELS AND EDUCATION
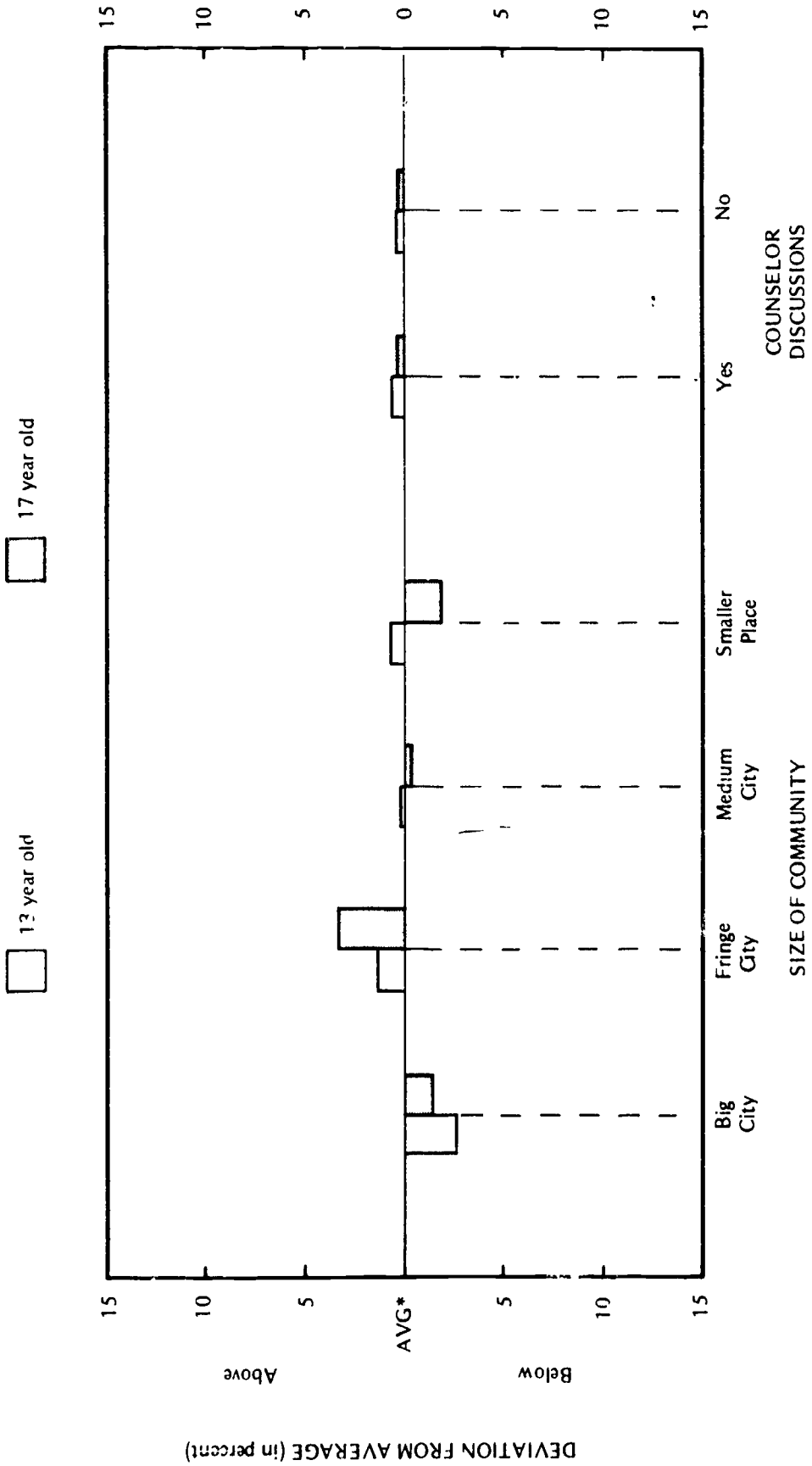
*AVERAGE SCORES: 13 yr. olds -- 35.8%;   17 yr. olds -- 42.1%

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CONTENT DOMAIN 117. LEVELS AND EDUCATION

Overall Content Domain

This domain was one of five using identical items at both ages. Overall performance was at the boundary between poor and medium, averaging 39%. Thirteen year olds scored 35.8%, seventeen year olds scored only 6.3% higher, averaging 42.1%. For 13 year olds, individual item scores ranged from 19.6% to 70.6%; the range for 17 year olds was even larger, from 9.6% to 76.4%. It is at least apparent that the items of this domain varied extremely in difficulty level, and that the difficulty level for some items was much higher than had been anticipated.

Demographic Variations

Average performance patterns for the domain were again similar to those for the test as a whole within the demographic variables, for both age groups, although for both ages, SOC 1 students did relatively well, scoring only 1 or 2% lower than the state average. At both age levels, students who did not remember whether or not they had discussed career plans with a counselor scored about 4.5% lower than average, which is not surprising. Other than this insignificant difference, scores for both ages were quite uniform across all demographic variables, again indicating little or no effect of exposure to career guidance, planning, or work experience.

Individual Questions

Almost all of the questions in this domain departed from normal patterns within one or more of the demographic variables. For 13 year olds, question 16, which dealt with the educational preparation for the job of secretary, female students, who usually perform at least equally to males, and who might be expected to know more about the job of secretary, scored 5% below males. Also for question 16, students who had participated in a program of career guidance or education, scored 5% higher than those who did not, again a reversal of normal patterns. Normally, students who have not decided about planning to attend a Voc-Tech school do as well or better than average, which is usually higher than the score of students who plan to attend Voc-Tech school. In questions 16, 18 and 20 this pattern was reversed; with no apparent reason.

Questions 20 and 21 also showed a departute from normal patterns
in the answers of male and female students. Question 20 was about
oil-field roughnecks; girls scored 9.3% lower than boys, perhaps
because of the nature of the job, it is doubtful that any woman
has ever worked as a roughneck. Question 21 dealt with the educa-
tional preparation of draftsmen; girls unaccountably scored 8.3%
higher than boys! For 17 year olds, the male-female pattern was
the same for the question (no. 23) about roughnecks. Other devia-
tions in demographic patterns for seventeen's were all in the SOC
variable. In question 20, about meatcutters, SOC 1 students
scored 5.7% above average, perhaps because this is a job with
which they are more familiar. Strangely, SOC 1 students scored
3.2% above average (average score was only 9.6%!) in the question
about draftsmen as well. Some possible explanations of these
deviant patterns may be found in the following paragraph since
many of the questions which exhibited these "strange" patterns
fell into the "hard" question category.

Exceptionally Hard or Easy Questions

Four of these six questions fell into the "hard" question category -
those dealing with the educational requirements of secretaries,
electronics technicians, roughnecks, and draftsmen. The roughneck
question was "hard" for 13 year olds but not seventeens, the others
were "hard" for both age groups. These results seem strange since
these jobs would be expected to be of high visibility to junior
and senior high school students, and it might be expected that they
would be among the careers discussed in any program of career
guidance or education. It is apparent at least that most Connecti-
cut students are not aware that high school can provide them
with the education necessary to become a secretary or a draftsmen.
Another explanation of the pattern reversals of "hard" questions
may be found in the discussion of similar questions in Content Domain 119.

13 Year Olds

118   OCCUF .TIONS AFFECT THE AMOUNT OF LEISURE TIME

Some kinds of work leave more time for fun, recreation, and hobbies
than others. For each of the Occupations listed below place an "X"
in the column at the right to show the amount of LEISURE TIME you
think each worker might have. (Average leisure time is for a worker
who is employed eight hours a day, five days a week, with a two to
three week paid vacation, and holidays off.)

	LEISURE TIME		
	Above Average	Average	Below Average
EXAMPLES:			
File Clerk	____	X	____
Teacher	X	____	____
Automobile Salesman	____	____	X
22. Sales Clerk	1 _10.6_	②_69.9_	3 _19.0_
23. Airline Pilot	①_50.0_	2 _14.1_	3 _34.9_
24. Dairy Farmer	1 _18.4_	2 _30.3_	③_50.4_
25. Television Repairman	1 _23.0_	②_56.6_	3 _19.5_
26. Librarian	1 _36.6_	②_46.0_	3 _16.8_

17 Year Olds

118 OCCUPATIONS AFFECT THE AMOUNT OF LEISURE TIME

Some kinds of work leave more time for fun, recreation, and hobbies
than others. For each of the Occupations listed below place an "X"
in the column at the right to show the amount of LEISURE TIME you
think each worker might have. (Average leisure time is for a worker
who is employed eight hours a day, five days a week, with a two to
three week paid vacation, and holidays off.)

LEISURE TIME

	Above Average	Average	Below Average
EXAMPLES:			
File Clerk	____	X	____
Teacher	X	____	____
Automobile Salesman	____	____	X
25. Sales Clerk	1 7.8	② 72.3	3 19.5
26. Airline Pilot	① 50.6	2 13.9	3 35.2
27. Dairy Farmer	1 10.8	2 17.1	③ 71.9
28. Television Repairman	1 18.7	② 62.8	3 18.3
29. Librarian	1 35.4	② 55.3	3 9.2
30. Gasoline Station Attendant	1 17.4	2 39.4	③ 43.1
31. Bank President	① 51.6	2 21.8	3 26.1

TABLE 6.3.09 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 118 -- LEISURE TIME
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		22	23	24	25	26
CONNECTICUT	54.6	69.9	50.0	50.4	56.6	46.0
SEX						
Female	53.7	69.0	47.6	49.1	56.2	46.6
Male	55.7	71.1	52.9	52.0	56.8	45.5
SIZE OF COMMUNITY						
Big City	53.5	66.8	54.7	45.1	53.8	47.3
Fringe City	55.3	73.0	47.1	55.0	55.9	45.4
Medium City	54.7	70.3	50.6	49.7	58.0	44.9
Smaller Place	54.7	69.4	48.4	51.2	57.9	46.5
CAREER GUIDANCE OR EDUCATION						
Yes	53.2	68.9	49.6	49.3	54.3	43.9
No	54.8	70.5	49.9	50.2	57.0	46.3
COUNSELOR DISCUSSIONS						
Yes	53.3	66.7	48.8	49.9	55.5	45.4
No	54.9	71.7	49.0	50.7	57.7	45.5
Don't Remember	53.9	68.3	57.4	46.7	50.8	46.5
PLANNING VOC-TECH SCHOOL						
Yes	54.3	72.8	54.3	47.9	54.9	41.8
No	54.6	69.2	48.0	52.4	58.4	46.0
Undecided	53.8	70.6	50.3	47.2	54.2	46.7
JOB DECISION						
Yes	54.8	69.8	50.5	50.9	57.0	45.9
No	53.6	70.1	48.5	49.1	55.6	44.9

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.10 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 118 -- LEISURE TIME
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)						
		25	26	27	28	29	30	31
CONNECTICUT	58.2	72.3	50.5	71.9	62.8	55.2	43.1	51.6
SEX								
Female	56.4	73.0	46.7	69.3	60.2	54.8	42.8	48.3
Male	60.1	71.5	54.5	74.8	65.5	55.7	43.5	55.3
SIZE OF COMMUNITY								
Big City	57.4	70.6	51.7	61.3	57.7	55.8	47.8	57.1
Fringe City	60.5	70.9	52.9	73.8	70.6	56.2	45.6	53.5
Medium City	58.1	73.3	48.6	75.8	62.6	56.8	40.6	49.3
Smaller Place	56.8	73.9	49.4	73.9	59.7	52.5	39.9	48.2
CAREER GUIDANCE OR EDUCATION								
Yes	58.2	70.2	50.9	70.8	62.6	54.6	43.5	55.0
No	58.2	73.3	50.5	72.2	62.7	55.5	43.0	50.2
COUNSELOR DISCUSSIONS								
Yes	58.3	72.7	51.3	72.5	62.4	55.9	43.0	50.5
No	58.2	72.8	47.6	72.8	62.7	54.5	43.5	53.4
Don't Remember	57.3	67.2	55.7	63.3	66.9	51.2	42.4	54.6
WORK EXPERIENCE								
Regular Job	59.2	72.4	53.3	74.8	63.4	55.7	43.7	51.4
Summer Job	58.0	71.0	48.6	70.6	62.4	56.0	43.3	54.3
Not Worked	56.8	79.5	48.7	68.5	61.8	53.2	39.9	46.0
Work Study	56.0	65.6	47.1	71.2	64.3	49.9	45.3	48.3
JOB DECISION								
Yes	57.4	71.8	49.1	71.4	61.2	53.2	43.4	51.7
No	59.7	73.3	52.9	73.2	65.7	58.8	43.5	51.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3 15

DEVIATION FROM AVERAGE PERFORMANCE SCORES
BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 118 - LEISURE TIME
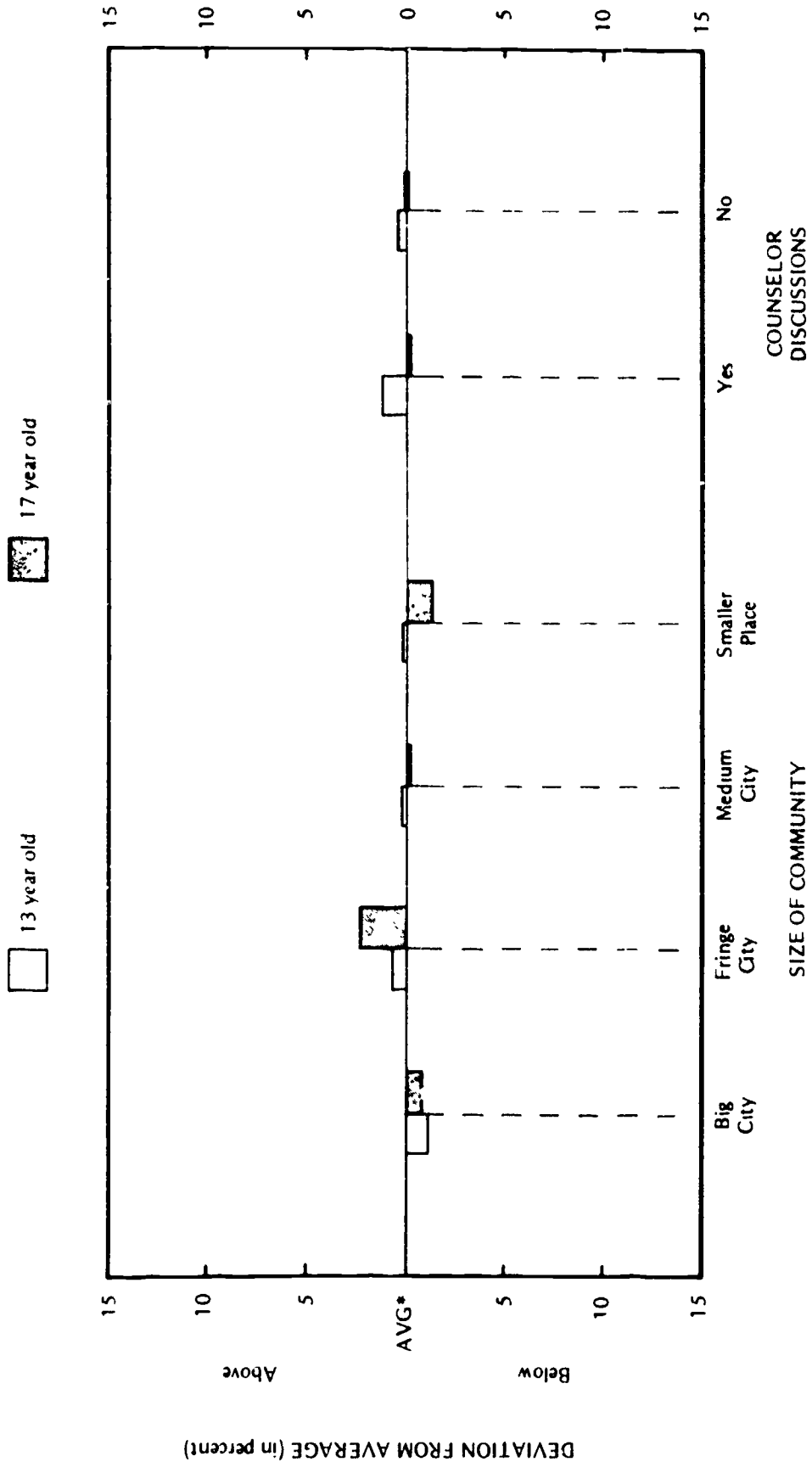
*AVERAGE SCORES: 13 yr. olds — 54.6%;   17 yr. olds —58.2%

CONTENT DOMAIN 118 LEISURE TIME

Overall Content Domain

Overall performance for this content domain was just into the high
range, averaging 56.4%. Performance for both ages was quite similar.
Thirteen year olds scored 54.6%, seventeen year olds scored 58.2%.
The five thirteen year old questions constituted all but two of
the questions for seventeens. Looking at just those five questions,
seventeens averaged 62.5%. The item scores were moderately clustered;
the scores for thirteens ranged from 46% to 70%, a spread of 24%;
seventeens ranged from 72% to 43% for a spread of 29%. In general,
both 13 year olds and 17 year olds were quite familiar with the
leisure time associated with the various occupations tested.

Demographic Variations

Average performance patterns for this domain were not similar to
those for the test as a whole, since for both age groups there was
essentially no variation of scores across (and within) all the
demographic variables, for both age groups. The 13 year old data
had a spread of only 2.5%, the 17 year old data had a spread of
only 4.1%. Although 17 year old girls averaged 3.7% lower than boys,
the data again indicate that ˙r the domain as a whole, membership in
a particular demographic group had little or no effect on performance.

Individual Questions

Other than some relatively insignificant variations within the SOC
category, most of the questions in this domain show performance
patterns similar to those of the domain as a whole within the
demographic variables. In the 13 year old test, SOC 1 students
scored almost 5% higher than average for the state on question 23
which related to the leisure time of airline pilots. The overall
variation from expected pattern within the domain for SOC was not
significant however. For the 17 year old questions, there was
somewhat more variation within the SOC category from the pattern
of the domain as a whole. In question 27, about dairy farmers,
SOC 1 students scored 10.6% below the state average (13 year old
SOC 1 students were 5% below average for the same question) more
than likely due to the lack of knowledge of big city students of
the occupation of dairy farming in general. In questions 30 and
31, about gasoline station attendants and bank presidents, big city

students scored 4.7% and 5.5% better than average, respectively; but probably due to entirely different reasons. It seems some-what likely that these students are much more familiar with the low level job of gasoline station attendant and <u>know</u> that they have little leisure time. It also seems likely that they might tend more to glamorize the job of bank president and assume they had greater amounts of leisure time. (In both ages, these students did somewhat better than their peers on both questions dealing with occupations which have above average amounts of leisure time.)

Exceptionally Hard or Easy Questions

None of the questions in this domain fell into the category of "hard" or "easy".

119   JOB SPECIALIZATION AFFECTS JOB SATISFACTION

QUESTIONS 27 TO 31 DEAL WITH THE REASONS PEOPLE LIKE OR DISLIKE THEIR
JOBS AND THE DEGREE OF SPECIALIZATION THERE IS TO A SPECIFIC JOB.   IT IS
IMPORTANT TO REMEMBER THAT PEOPLE MAY LIKE OR DISLIKE A JOB FOR DIFFERENT
REASONS.   READ THE STORY FIRST AND THEN ANSWER THE QUESTIONS.   MARK YOUR
ANSWERS (WITH AN "X") AS THOUGH YOU WERE THE PERSON IN THE STORY RATHER
THAN THE WAY YOU FEEL ABOUT THE DETAILS OF THE JOB.

Sam is a taxi driver and has worked for the same company in a large
city for seventeen years. He is very proud of his record because
he hasn't had any traffic tickets or accidents since he was employed
with his company. Sam dropped out of high school at age sixteen.
He served time in the military service as an infantry man. He has
had no formal training since high school, and taxi driving is the
only job he has ever had. He is married and has two children. Sam
would like to make more money so that his family could have more of
the pleasures in life, but he is earning the top amount of money
possible for a taxi driver and he is afraid to try any other job
because of his lack of education and other job experience. Sam plans
to continue driving a cab at least until his children leave home and
are on their own.

27.   The value of earning more money as a job satisfaction factor
      for Sam appears to be:

   ① 21.0 High

   2 25.7 Average

   3 42.9 Low

   4 9.5 Can't say, not enough information given

28.   The actual value of driving a taxi as it appears to Sam seems to be:

   1 27.6 High

   ② 32.9 Average

   3 30.1 Low

   4 8.6 Can't say, not enough information given

29.   If Sam were to quit his job and try another one, what amount of
      success does it appear that he would have in maintaining the same
      standard of living for his family:

   1 4.7 High

   2 10.8 Average

   ③ 70.4 Low

   4 13.2 Can't say, not enough information given

119   JOB SPECIALIZATION AFFECTS JOB SATISFACTION (CONTINUED)

30.   As a taxi driver, how much does it appear that Sam desires social relations with other people while he is on the job?

1 **31.6** High

2 **24.0** Average

3 **7.2** Low

④**36.9** Can't say, not enough information given

31.   Sam seems to give the importance of job security a rating of:

①**46.9** High

2 **28.4** Average

3 **9.1** Low

4 **15.2** Can't say, not enough information given

119 JOB SPECIALIZATION AFFECTS JOB SATISFACTION

QUESTIONS 32 to 36 DEAL WITH THE REASONS PEOPLE LIKE OR DISLIKE THEIR
JOBS AND THE DEGREE OF SPECIALIZATION THERE IS TO A SPECIFIC JOB. IT IS
IMPORTANT TO REMEMBER THAT PEOPLE MAY LIKE OR DISLIKE A JOB FOR DIFFERENT
REASONS. READ THE STORY FIRST AND THEN ANSWER THE QUESTIONS. MARK YOUR
ANSWERS (WITH AN "X") AS THOUGH YOU WERE THE PERSON IN THE STORY RATHER
THAN THE WAY YOU FEEL ABOUT THE DETAILS OF THE JOB.

Sam is a taxi driver and has worked for the same company in a large
city for seventeen years. He is very proud of his record because
he hasn't had any traffic tickets or accidents since he was employed
with his company. Sam dropped out of high school at age sixteen.
He served time in the military service as an infantry man. He has
had no formal training since high school, and taxi driving is the
only job he has ever had. He is married and has two children. Sam
would like to make more money so that his family could have more of
the pleasures of life, but he is earning the top amount of money
possible for a taxi driver and he is afraid to try any other job
because of his lack of education and other job experience. Sam plans
to continue driving a cab at least until his children leave home and
are on their own.

32. The value of earning more money as a job satisfaction factor
     for Sam appears to be:

     ① 25.8 High

     2 31.4 Average

     3 34.8 Low

     4 7.7 Can't say, not enough information given

33. The actual value of driving a taxi as it appears to Sam seems to be:

     1 30.0 High

     ② 33.1 Average

     3 29.2 Low

     4 7.5 Can't say, not enough information given

34. If Sam were to quit his job and try another one, what amount of
     success does it appear that he would have in maintaining the same
     standard of living for his family:

     1 2.9 High

     2 9.2 Average

     ③ 71.6 Low

     4 16.2 Can't say, not enough information given

119   JOB SPECIALIZATION AFFECTS JOB SATISFACTION (CONTINUED)

35.   As a taxi driver, how much does it appear that Sam desires social
      relations with other people while he is on the job?

      1 _23.5_ High

      2 _16.0_ Average

      3 _7.7_ Low

      ④ _52.3_ Can't say, not enough information given

36.   Sam seems to give the importance of job security a rating of:

      ① _65.8_ High

      2 _17.6_ Average

      3 _7.7_ Low

      4 _8.5_ Can't say, not enough information given

TABLE 6.3.11 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS CONTENT DOMAIN 119 -- SPECIALIZATION/SATISFACTION (IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		27	28	29	30	31
CONNECTICUT	41.6	21.0	32.9	70.5	36.9	46.9
SEX						
Female	42.9	19.0	35.6	73.5	39.1	47.3
Male	40.4	23.0	30.3	67.4	34.6	46.5
SIZE OF COMMUNITY						
Big City	37.1	22.0	26.1	60.2	31.1	36.2
Fringe City	43.4	21.9	51.9	73.5	40.2	49.7
Medium City	42.7	20.7	51.5	70.5	39.1	51.5
Smaller Place	42.6	19.9	52.7	75.3	35.5	48.4
CAREER GUIDANCE OR EDUCATION						
Yes	40.9	23.6	36.1	68.1	33.4	43.1
No	42.0	20.4	32.2	71.4	37.7	48.3
COUNSELOR DISCUSSIONS						
Yes	42.4	22.0	34.1	72.4	36.0	47.5
No	42.3	20.2	32.7	71.9	37.9	48.6
Don't Remember	36.5	24.4	31.6	57.9	32.8	35.7
PLANNING VOC-TECH SCHOOL						
Yes	37.9	22.3	40.8	62.3	24.6	39.3
No	43.8	22.3	32.5	72.9	39.8	51.4
Undecided	39.9	18.3	30.0	70.2	37.1	44.0
JOB DECISION						
Yes	41.5	21.1	34.6	70.8	34.9	46.2
No	42.0	20.9	30.3	70.3	40.3	48.3

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.12 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 119 -- SPECIALIZATION/SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)					
		32	33	34	35	36
CONNECTICUT	49.7	25.8	33.1	71.5	52.3	65.9
SEX						
Female	51.1	24.5	34.6	73.6	54.4	68.4
Male	48.1	27.2	31.4	69.4	49.8	62.9
SIZE OF COMMUNITY						
Big City	43.9	19.6	33.9	65.5	42.9	57.4
Fringe City	52.7	29.0	31.9	72.8	58.8	71.1
Medium City	49.4	25.6	31.7	72.6	50.9	66.3
Smaller Place	51.4	27.6	34.8	73.7	54.3	66.7
CAREER GUIDANCE OR EDUCATION						
Yes	47.8	23.7	31.9	71.3	49.0	63.2
No	50.5	26.7	33.7	71.7	53.5	66.9
COUNSELOR DISCUSSIONS						
Yes	51.6	26.0	33.5	73.8	54.3	70.5
No	47.2	25.5	30.6	69.4	49.8	60.5
Don't Remember	42.1	24.7	39.4	59.9	43.2	43.1
WORK EXPERIENCE						
Regular Job	51.1	27.6	33.3	71.6	53.1	69.5
Summer Job	49.2	25.5	33.8	71.3	52.1	63.4
Not Worked	48.3	23.6	30.5	71.8	54.4	61.0
Work Study	46.4	18.5	30.6	75.9	45.3	61.7
JOB DECISION						
Yes	49.3	25.6	33.4	72.5	50.1	65.1
No	50.4	25.9	32.5	70.2	56.2	67.3

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6 3.18

DEVIATION FROM AVERAGE PERFORMANCE SCORES
BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS
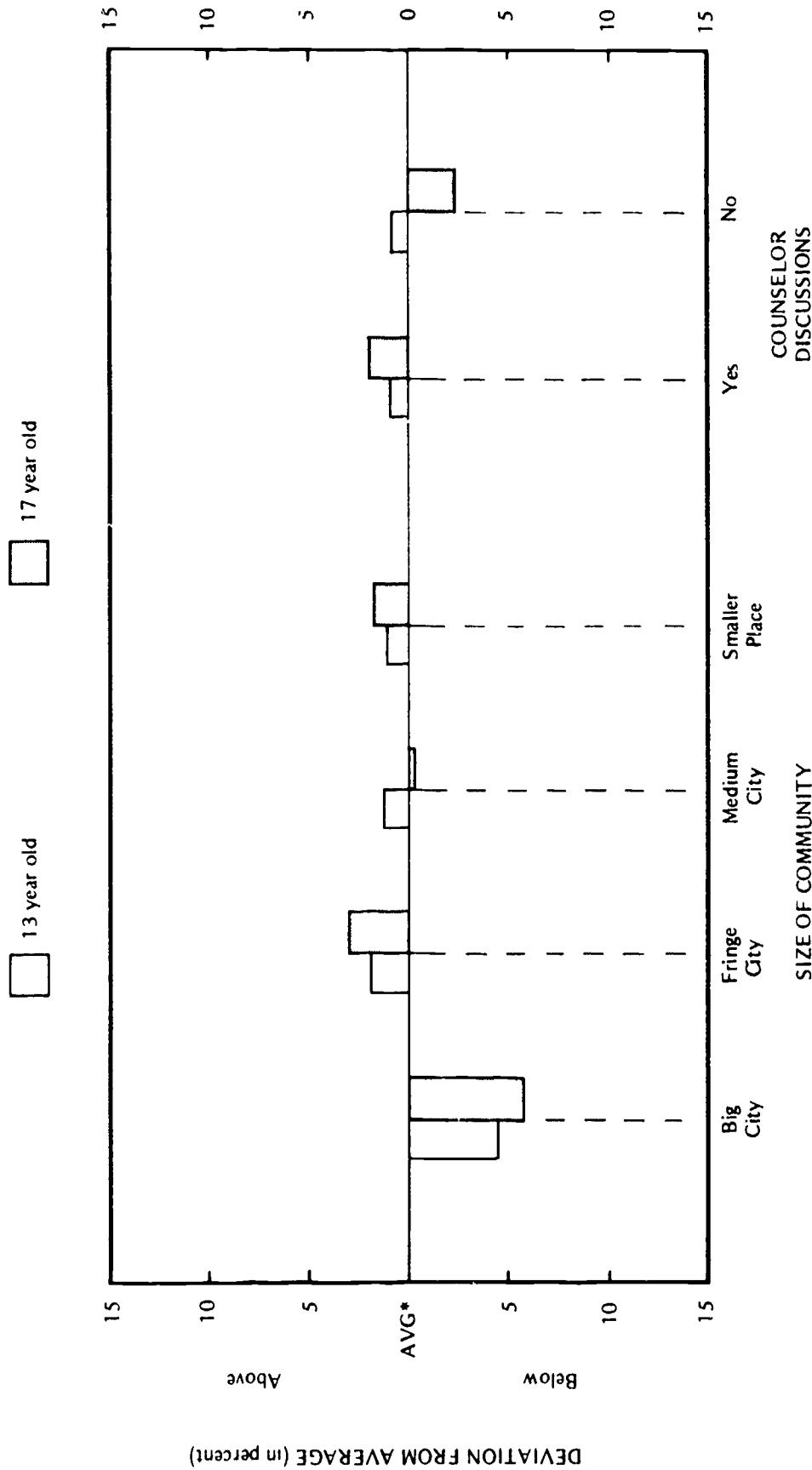
CONTENT DOMAIN 119 — SPECIALIZATION/SATISFACTION

*AVERAGE SCORES: 13 yr. olds — 41.6%; 17 yr. olds — 49.7%

CONTENT DOMAIN 119   SPECIALIZATION/SATISFACTION

Overall Content Domain

This is the second of five content domains employing identical
questions at both age levels. Overall performance was medium,
averaging 45.6%; the 13 year old average score was 41.6%, seven-
teens did slightly better, averaging 49.7%. Scores ranged from
21% to 70% for thirteens and from 25% to 74% for seventeens.

Demographic Variations

Average performance patterns for this domain for both age groups
were generally similar to those for the test as a whole for
all demographic variables. For both age groups, females did
slightly better than males, fringe city students did best and
big city students worst in the SOC category, students in programs
of career guidance or education scored slightly lower than other
students. Thirteen year old students who had counselor discussions
scored slightly lower than those who did not; seventeen year old
students who had counselor discussions scored somewhat higher
than those who did not; in both ages, students who could not
remember whether they did or did not have counselor discussions
scored lower. Thirteen year old students planning to attend
voc-tech schools scored lower than those who were not or who
were undecided. Seventeen year olds with regular jobs scored
highest, and those in work-study programs scored lowest, in
the work experience category. For both ages, the job decision
category showed no differences between those who had decided
on post-school jobs and those who had not.

Individual Questions

For 17 year olds, each of the questions of the content domain
show performance patterns similar to those of the domain as a
whole within each of the demographic variables. For 13 year
olds, two of the questions showed performance patterns that
differed from the patterns of the domain as a whole within at
least one demographic variable. In question 27 which addresses
the issue of money as a job satisfaction factor, girls scored
4% below boys, SOC 1 scored 1.0% above average, and students
in career guidance or education programs scored 2.6% above
average.

As will be discussed later, question 27 is a "hard" question, that is, more students chose the wrong answer than the right answer. The pattern seen here often occurs for hard questions, i.e., the students who normally perform lower than average, appear, on hard questions to be brighter. It seems likely that what happens in these cases, is really in the normal pattern, in that these normally lower performing students are not selecting as the "right" answer, the one picked by their brighter peers.

Question 28 borders on being a hard question; 33% marked the right answer, and two wrong answers were selected by 28% and 30% of the students. The situation described above may well apply here too, since the pattern is the same for the SOC, career guidance or education, and planning voc-tech school, variables.

Exceptionally Hard or Easy Questions

The first question in this domain for both age groups falls into the "hard" category. (See the discussion above.) The question asks the students to assess the value of earning more money as a job satisfaction factor. Although the story clearly states that "Sam would like to make more money . . . ", fully two-thirds of the students, at both ages, did not select "high" as the value assessment. If this sequence of questions is to be used again, more emphasis must be put on Sam's desire for money.

211 AWARENESS OF SELF CHARACTERISTICS HELP TO MAKE WISE CAREER CHOICES

YOUR UNDERSTANDING OF YOUR OWN INTERESTS AND ABILITIES WILL HELP YOU
TO MAKE CAREER PLANS MORE WISELY. EACH OF THE FOLLOWING ITEMS GIVES
YOU INFORMATION ABOUT THE ABILITIES AND INTERESTS OF A STUDENT YOUR
AGE, AND LISTS SOME POSSIBLE FUTURE OCCUPATIONS THE STUDENT MAY CONSIDER.
MANY JOBS MIGHT BE APPROPRIATE, BUT FROM THOSE LISTED YOU ARE ASKED TO
SELECT THE OCCUPATION WHICH SEEMS BEST SUITED FOR THE PERSON DESCRIBED.
MARK ONLY ONE CHOICE FOR EACH ITEM.

32. Carolyn has won a prize for a chemistry exhibit at a state fair.
     Her highest grades are in science, but she is weak in art and music.
     She scores very high on general tests of intelligence. She does
     volunteer work in the community hospital on weekends and likes to
     work directly with people. After college, she would like to attend
     graduate school.

     Which of the following occupations seems best suited to Carolyn's
     characteristics:

     1 __9.7__ medical illustrator

     2 __49.7__ laboratory assistant

     ③ __23.8__ physician

     4 __15.3__ medical receptionist

33. Henry is considered a good leader. Last year, as president of the
     Student Council, he enjoyed planning and leading Council activities.
     He loves sports, and plays on his school baseball team. He earns
     average grades in school, but low grades in science and English.
     After college, Henry would like to find a job in sports which makes
     use of his leadership ability.

     For which of the following occupations does Henry seem best suited?

     ① __87.2__ athletic coach

     2 __2.7__ scoreboard operator

     3 __1.7__ doctor for football team

     4 __7.5__ sports writer

211 AWARENESS OF SELF CHARACTERISTICS HELP TO MAKE WISE CAREER CHOICES (CONT'D)

34. Mike enjoys working with his hands. His highest grades are in shop class and he has better than average mechanical aptitude. Mike is well-liked by classmates, but he is a better follower than a leader. After high school he would like to begin working at a job that will pay reasonably well. He would like to work out-of-doors.

Which of the following jobs would probably be best for Mike to consider?

1 _4.2_ plumber

②_76.2_ construction worker

3 _14.3_ construction foreman

4 _3.8_ president of construction company

35. Barry has always done well in school, especially in English and creative writing. And he has printed a small newspaper for neighbors and friends. He works on his school paper, and particularly likes assignments which involve interviewing people. He was editor of the school paper one semester, but did not like the work much, because he had to do more supervising and less writing.

Of the following jobs, which would probably be best for Barry?

1 _5.6_ newspaper copy boy

2 _13.8_ novelist

3 _15.2_ newspaper publisher

④_64.0_ newspaper reporter

36. Elaine enjoys working with children. During her free period, she works with a fourth grade teacher, helping pupils with reading and math. She would like to find a summer job as a camp counselor, so that she can continue to work directly with young children. She expresses herself well when speaking and does well in tasks that involve clerical detail. Elaine could succeed in college, but wouldn't want to spend ore than two years in college. Eventually, she would like to get married and raise a family.

Which of the following jobs fits best with Elaine's interests and abilities?

①_85.8_ teacher aide

2 _2.1_ school bus driver

3 _6.1_ school principal

4 _4.8_ school superintendent

211   AWARENESS OF SELF CHARACTERISTICS HELP TO MAKE WISE CAREER CHOICES

YOUR UNDERSTANDING OF YOUR OWN INTERESTS AND ABILITIES WILL HELP YOU
TO MAKE CAREER PLANS MORE WISELY.   EACH OF THE FOLLOWING ITEMS GIVES
YOU INFORMATION ABOUT THE ABILITIES AND INTERESTS OF A STUDENT YOUR
AGE, AND LISTS SOME POSSIBLE FUTURE OCCUPATIONS THE STUDENT MAY CONSIDER.
MANY JOBS MIGHT BE APPROPRIATE, BUT FROM THOSE LISTED YOU ARE ASKED TO
SELECT THE OCCUPATION WHICH SEEMS BEST SUITED FOR THE PERSON DESCRIBED.
MARK ONLY ONE CHOICE FOR EACH ITEM.

37.   Stan has earned high grades in mathematics but low grades in science
      and art. He enjoys work that involves detail. He is the treasurer
      of the school student body and plans to attend a four year college.

      For which of the following jobs does Stan seem best suited?

      1 8.9 bank cashier

      2 11.7 bookkeeper

      ③ 70.3 accountant

      4 7.6 professor of economics

38.   Edward has a strong interest and aptitude in the biological sciences,
      and is weakest in foreign languages and social studies. As a waiter
      during summer vacation, he found that he enjoyed working directly
      with people. A member of his school debate club, he is comfortable
      speaking before groups of people. Ed is precise in his work, and
      plans to attend college.

      Of the following occupations, which fits best with his interests
      and aptitudes?

      1 6.0 hospital orderly

      2 8.5 laboratory technician

      ③ 82.3 biology teacher

      4 2.1 writer of biological textbooks

211 AWARENESS OF SELF CHARACTERISTICS HELP TO MAKE WISE CAREER CHOICES (CONT'D)

39. Anne is interested in people. She especially enjoyed a social studies project in which she studied the growth of social welfare programs in this country. Her interests are more along theoretical lines rather than in practical applications of knowledge. Working as a salesgirl during the summer, Anne didn't enjoy the constant public contact which the job required. She scores high on tests of language arts and mathematics. Anne plans to attend college and, money permitting, would like to pursue additional specialized training in graduate school.

Which of the following occupations best matches Anne's aptitudes and interests?

1 __6.0__ marriage counselor

2 __6.0__ airline stewardess

3 __7.8__ probation officer

④ __79.5__ social scientist and researcher

40. Sally is interested in music, fashion, and interior design. She scores high on tests of creativity. She earns below average grades in most school subjects. She does however, earn high grades in visual arts and in music courses. She wants to begin working immediately after high school graduation. She is poised and self confident and would accept a job that was accompanied by a formal training program.

For which of the following occupations does Sally seem best suited?

1 __4.9__ architect

② __82.5__ decorator trainee, home furnishing store

3 __8.7__ high school art instructor

4 __3.2__ stock girl, home furnishings store

41. Since childhood, Jerry has been interested in transportation, and has also enjoyed doing things with his hands. He scores high on tests of mechanical ability, has excellent eye-hand coordination, and is weak in reading and language arts skills. After completing high school, he would like to attend a trade school or to find work accompanied by an on-the-job training program.

Of the following occupations, which seems most consistent with Jerry's interests and abilities?

① __51.3__ airplane mechanic

2 __42.9__ mechanical engineer

3 __2.3__ airport guard

4 __2.6__ director, traffic safety council

TABLE 6.3.13 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 211 -- SELF AWARENESS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		32	33	34	35	36
ONNECTICUT	67.4	23.8	87.2	76.2	63.9	85.7
SEX						
Female	69.3	26.6	88.8	77.6	65.3	88.1
Male	65.4	21.0	85.5	74.6	62.6	83.2
SIZE OF COMMUNITY						
Big City	58.4	17.6	75.4	68.3	53.6	77.3
Fringe City	70.3	30.0	89.6	74.8	69.1	87.9
Medium City	68.8	22.5	88.9	80.5	65.6	86.6
Smaller Place	70.1	24.3	92.1	79.3	65.7	89.3
CAREER GUIDANCE OR EDUCATION						
Yes	63.5	18.8	83.6	73.8	58.3	83.0
No	68.6	25.2	88.4	77.1	65.7	86.5
COUNSELOR DISCUSSIONS						
Yes	67.1	23.1	87.8	76.2	62.1	86.1
No	68.5	25.0	88.3	77.5	65.8	86.0
Don't Remember	60.4	17.5	77.9	68.1	56.4	81.9
PLANNING VOC-TECH SCHOOL						
Yes	62.7	21.9	78.8	75.3	59.4	78.3
No	68.7	25.5	88.8	75.7	66.8	86.9
Undecided	67.0	22.1	88.1	77.0	60.9	86.7
JOB DECISION						
Yes	66.9	23.7	86.6	75.3	63.7	85.3
No	68.2	23.8	88.2	78.2	64.2	86.5

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.3.4 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 211 -- SELF AWARENESS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		37	38	39	40	41
CONNECTICUT	73.2	70.3	82.3	79.5	82.5	51.3
SEX						
Female	73.9	71.6	83.9	80.8	85.2	48.0
Male	72.4	69.2	80.4	78.2	79.4	55.0
SIZE OF COMMUNITY						
Big City	67.6	65.8	79.8	75.7	75.5	41.3
Fringe City	77.4	73.8	86.3	83.0	85.4	58.6
Medium City	72.6	71.7	79.7	79.6	84.1	48.0
Smaller Place	73.8	69.2	82.8	78.9	83.2	54.9
CAREER GUIDANCE OR EDUCATION						
Yes	71.6	69.9	81.3	78.0	80.3	48.3
No	73.9	70.6	82.6	80.2	83.4	52.6
COUNSELOR DISCUSSIONS						
Yes	75.7	71.5	85.3	82.8	85.6	53.4
No	69.9	70.8	78.0	74.5	78.4	48.0
Don't Remember	63.1	59.0	71.7	69.6	69.3	45.7
WORK EXPERIENCE						
Regular Job	75.4	73.1	84.0	81.3	85.8	53.0
Summer Job	72.6	69.3	92.4	78.6	80.4	52.1
Not Worked	71.0	68.9	78.6	80.0	78.7	49.0
Work Study	67.8	63.3	77.8	75.7	80.9	41.2
JOB DECISION						
Yes	73.0	70.0	81.7	80.6	82.4	50.1
No	73.7	71.4	83.3	77.8	82.6	53.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.21

DEVIATION FROM AVERAGE PERFORMANCE SCORES

BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 211 – SELF AWARENESS
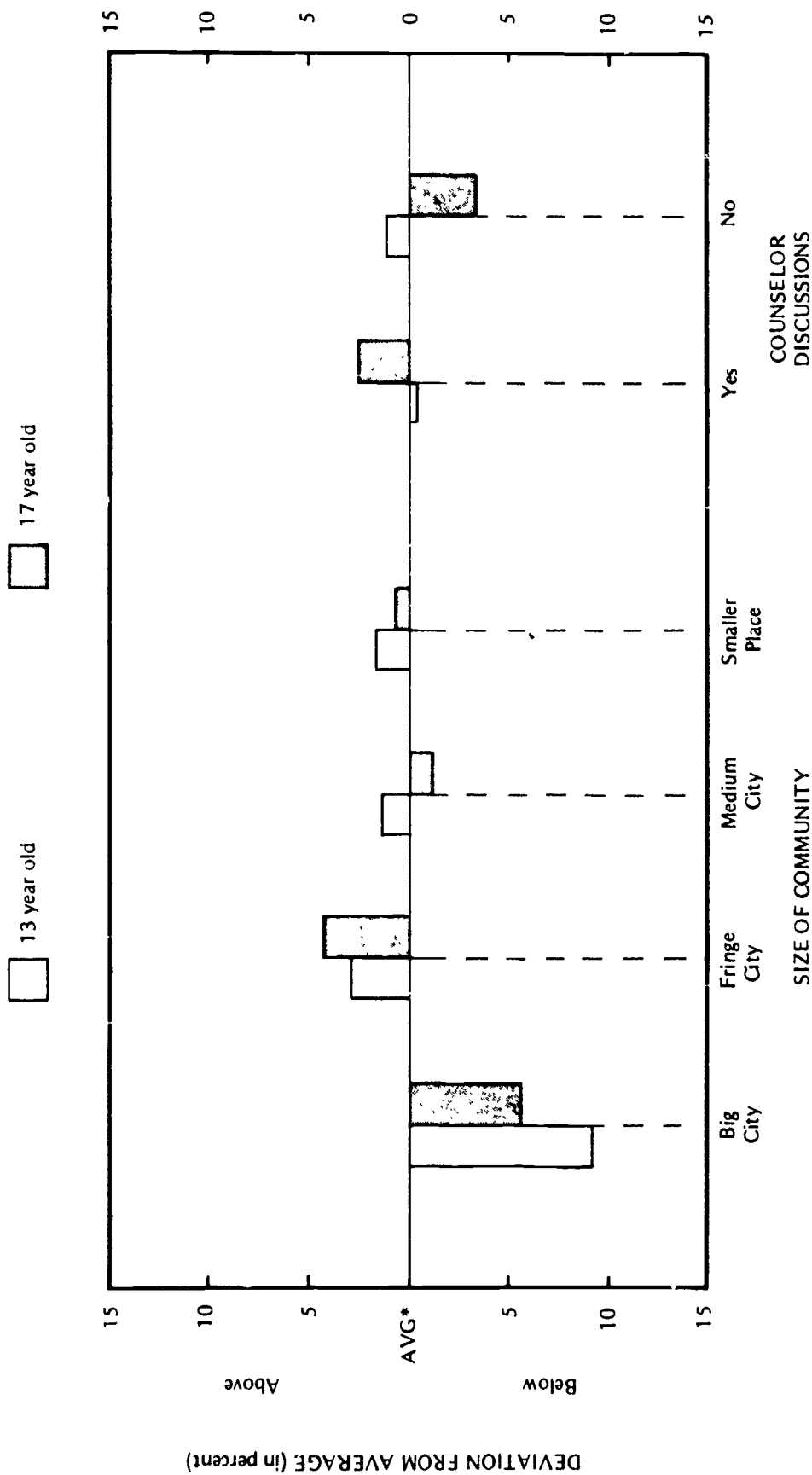
*AVERAGE SCORES: 13 yr. olds – 67.4%; 17 yr. olds – 73.2%

CONTENT DOMAIN 211   SELF AWARENESS

Overall Content Domain

Overall performance for this content domain was on the high side,
averaging 70.3%, with the 13 year olds scoring 5.8% lower than the
17 year olds. Average scores are somewhat misleading, since the
item scores showed a large spread, particularly for 13 year olds,
where the item scores ranged from 23.8% to 85.8%. For 17 year olds
the spread was only 31.2%. In general, it can be concluded that
both 13 and 17 year olds were able to relate a person's strong and
weak points to a sensible judgment about his career prospects.

Demographic Variations

Average performance patterns for this domain, for both age groups,
were generally similar to those for the test as a whole, within
the demographic variables, except that Big City students are
further behind the other students than they are in most of the
other content domains. A possible explanation for this may be
the special attitudes toward self-awareness common in some
big city cultures.

Individual Questions

With the exception of the two hard questions discussed in the next
paragraph, the questions of this domain show performance patterns
for both age groups similar to those of the domain and test as a
whole within each of the demographic variables.

Exceptionally Hard or Easy Questions

Question 32 for 13 year olds was a hard question, since 49.7%
selected a wrong answer (laboratory assistant) and only 23.8%
selected the correct answer (physician). The question seems clear
and straight-forward. The failure of so many students to select
the correct answer suggests that they suffer from sexism (by
assuming that only men can become physicians) or a low level of
ambition (the status of laboratory assistant is achievable, but
that of a physician is not). There is one demographic finding
for this question - students from Fringe Cities did very much
better than those from Big Cities (30.0% correct compared with
17.6%). By contrast, the other questions asked of 13 year olds
must be considered fairly easy, since from 64.0% to 87.2% of the
students gave the correct answers.

Question 41 for 17 year olds is almost a hard question. 51.3%
selected the correct answer (airplane mechanic), but a surprising
42.9% selected a wrong answer (mechanical engineer). Again, the
question seems clear, and the problem is to explain why so many
students selected an incorrect answer. It appears likely that a
great many students do not understand what kind of educational
preparation is required to become an engineer, specifically four
years of college and a lot of difficult reading. The confusion
may be verbal, since there are some operative jobs which contain
the word "engineer" as part of the title. This was one of the
few questions on which a higher percentage of boys (55.0%) than
girls (48.0%) selected the correct answer.

From 70.3% to 82.5% of the 17 year olds selected the correct
answers to the other four questions, which leads us to regard
these questions as fairly easy.

212   RELATIONSHIP BETWEEN LIFE EXPERIENCES AND CAREER CHOICES

IN EACH OF THE FOLLOWING ITEMS, YOU ARE GIVEN INFORMATION ABOUT A PERSON.
YOU ARE THEN GIVEN THREE OCCUPATIONAL CHOICES HE OR SHE MIGHT CONSIDER.
WITH THE INFORMATION YOU HAVE, YOU ARE ASKED TO DECIDE WHETHER EACH JOB
CHOICE IS LIKELY TO WORK OUT WELL FOR THAT PERSON. MARK ONLY ONE ANSWER
FOR EACH ITEM.

Frank and Mary were married after high school graduation. He had made
"C's" in most subjects with a few "B's". Frank took a job as a truck
driver so that they could afford to start raising a family. They have
been married six years, and have two children. Frank has never really
enjoyed his job, and would prefer work related to mechanics or engineering.
He has not changed jobs because he could not afford to take time off for
additional schooling or training. Recently, however, Frank inherited some
money from a relative. He can use the money to support his family for
one or two years while he prepares for work that he will find more satis-
fying. Following are some things Frank may now consider doing.

Indicate whether each seems an appropriate choice by marking an "X" in
the space provided.

37. Study to become an engineering technician

    1 46.7 very likely   ②42.4 somewhat likely   3 10.1 very unlikely

38. Become a bus driver

    1 11.7 very likely   2 12.2 somewhat likely   ③75.2 very unlikely

39. Study auto mechanics in trade school

    ①45.8 very likely   2 45.1 somewhat likely   3 8.3 very unlikely

212 RELATIONSHIP BETWEEN LIFE EXPERIENCES AND CAREER CHOICES (CONTINUED)

Marie is a 26 year-old professional singer. She studied voice and organ
in college, and played the organ in church. Last month she began complain-
ing of a sore throat. The doctors found a small growth on her vocal chords,
hospitalized her, and removed t'... growth. While Marie can still speak,
her singing voice has been impaired. She would like to continue working
in the field of music, even if she can no longer sing. As she must continue
to earn a steady income, she does not want to switch to a job that requires
additional training or schooling. Following are some jobs that Marie might
consider.

After each job, indicate whether it seems likely that this would be a
good choice for her.

40. Organ teacher

①56.0 very likely   2 39.4 somewhat likely   3 3.7 very unlikely

41. Nurse

1 4.4 very likely   2 9.4 somewhat likely   ③84.9 very unlikely

42. Professional organist

①62.2 very likely   2 32.3 somewhat likely   3 4.6 very unlikely

212 RELATIONSHIP BETWEEN LIFE EXPERIENCES AND CAREER CHOICES

IN EACH OF THE FOLLOWING ITEMS, YOU ARE GIVEN INFORMATION ABOUT A PERSON.
YOU ARE THEN GIVEN THREE OCCUPATIONAL CHOICES HE OR SHE MIGHT CONSIDER.
WITH THE INFORMATION YOU HAVE, YOU ARE ASKED TO DECIDE WHETHER EACH JOB
CHOICE IS LIKELY TO WORK OUT WELL FOR THAT PERSON. MARK ONLY ONE ANSWER
FOR EACH ITEM.

Ralph has worked as a criminal lawyer for ten years. Recently he experi-
enced a severe emotional shock and was unable to work for several months.
His doctor now says that Ralph can begin working again on a part-time basis,
and that his return to full-time work should be very gradual. He has told
Ralph to try to find work with less pressure, and less emotional stress.
Listed below are possible jobs which Ralph might consider during his period
of recovery.

Indicate whether each seems an appropriate choice by marking an "X" in the
space provided.

42. district attorney

1 _6.8_very appropriate   2 _22.1_ somewhat appropriate   ③_69.9_very inappropriate

43. substitute law teacher

①_41.6_very appropriate   2 _49.9_ somewhat appropriate   3 _7.8_very inappropriate

44. part-time researcher in law office

①_62.0_very appropriate   2 _29.9_ somewhat appropriate   3 _7.7_very inappropriate

Robert graduated from an engineering college and enlisted in the United
States Air Force. He was a squadron commander and later became a commercial
airline pilot. He flew for the airlines for 15 years. During his last
physical examination, it was discovered that his eyesight had weakened, and
no longer meets the standards for airline pilots. He enjoys airline work,
and would like to continue in some related job.

Following are some jobs Robert might consider. After each job indicate
whether it seems an appropriate choice for him.

45. airline ground instructor

①_50.6_very appropriate   2 _34.4_ somewhat appropriate   3 _14.3_very inappropriate

46. manager of large municapal airport

1 _28.0_very appropriate   2 _50.7_ somewhat appropriate   ③_20.4_very inappropriate

47. aeronautical engineer

1 _28.8_very appropriate   ②_41.4_ somewhat appropriate   3 _27.9_ very inappropriate

TABLE 6.3.15 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 212 -- LIFE EXPERIENCES
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)					
		37	38	39	40	41	42
CONNECTICUT	61.1	42.5	75.2	45.8	56.1	84.9	62.2
SEX							
Female	62.1	43.0	75.4	46.4	55.6	87.3	64.8
Male	60.1	41.9	75.2	45.0	56.4	82.3	59.6
SIZE OF COMMUNITY							
Big City	54.3	41.0	60.7	43.2	53.2	71.9	55.8
Fringe City	63.6	42.6	79.5	47.2	59.4	89.0	63.7
Medium City	62.8	44.0	78.1	48.5	56.0	87.1	63.1
Smaller Place	62.5	42.1	79.7	44.1	55.4	89.0	64.9
CAREER GUIDANCE OR EDUCATION							
Yes	59.7	40.1	72.7	46.2	58.5	78.8	62.2
No	61.7	43.3	76.2	45.8	55.4	86.7	62.7
COUNSELOR DISCUSSIONS							
Yes	61.9	40.2	77.6	50.4	55.9	83.1	64.4
No	61.8	42.5	76.4	44.4	56.9	87.8	62.8
Don't Remember	55.2	48.3	62.4	42.8	52.2	70.5	54.8
PLANNING VOC-TECH SCHOOL							
Y.s	58.6	47.3	65.3	49.0	56.7	75.6	57.6
No	62.2	41.6	77.8	48.1	55.5	86.5	63.9
Undecided	60.5	41.1	75.3	41.2	57.0	86.0	62.3
JOB DECISION							
Yes	60.5	41.2	74.9	44.8	55.5	83.8	62.6
No	62.6	44.4	76.4	48.0	57.4	87.0	62.2

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.16 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 212 -- LIFE EXPERIENCES
(IN PERCENT)

QUESTION NUMBER (SEE PRECEEDING FIGURE)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	42	43	44	45	46	47
CONNECTICUT	47.6	69.9	41.6	62.0	50.6	20.4	41.4
SEX							
Female	47.0	68.4	43.0	60.0	49.5	20.6	40.6
Male	48.3	71.6	40.3	64.1	51.6	20.1	42.2
SIZE OF COMMUNITY							
Big City	43.9	60.4	42.7	53.4	47.8	18.9	40.1
Fringe City	50.3	75.2	43.6	67.9	53.3	19.2	42.6
Medium City	49.0	74.0	40.2	64.4	50.3	24.1	40.8
Smaller Place	46.7	68.1	40.4	60.5	50.3	19.0	41.9
CAREER GUIDANCE OR EDUCATION							
Yes	46.9	69.8	40.5	58.1	53.1	17.5	42.6
No	47.9	69.9	42.3	63.5	49.6	21.5	40.9
COUNSELOR DISCUSSIONS							
Yes	48.0	72.4	41.3	62.3	50.5	20.3	41.0
No	47.5	67.8	42.7	62.0	50.4	20.9	41.0
Don't Remember	45.6	54.3	40.7	59.8	52.2	18.3	48.2
WORK EXPERIENCE							
Regular Job	48.2	71.9	41.6	62.2	50.7	21.5	41.6
Summer Job	47.0	67.2	41.9	62.9	49.9	19.3	40.8
Not Worked	48.4	72.7	43.5	59.9	51.5	22.3	40.3
Work Study	47.1	68.5	40.4	56.8	52.9	17.0	47.2
JOB DECISION							
Yes	47.4	69.2	41.7	61.7	50.5	19.7	41.7
No	48.1	71.4	41.8	62.6	50.6	21.6	40.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.24

DEVIATION FROM AVERAGE PERFORMANCE SCORES
BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 212 — LIFE EXPERIENCES
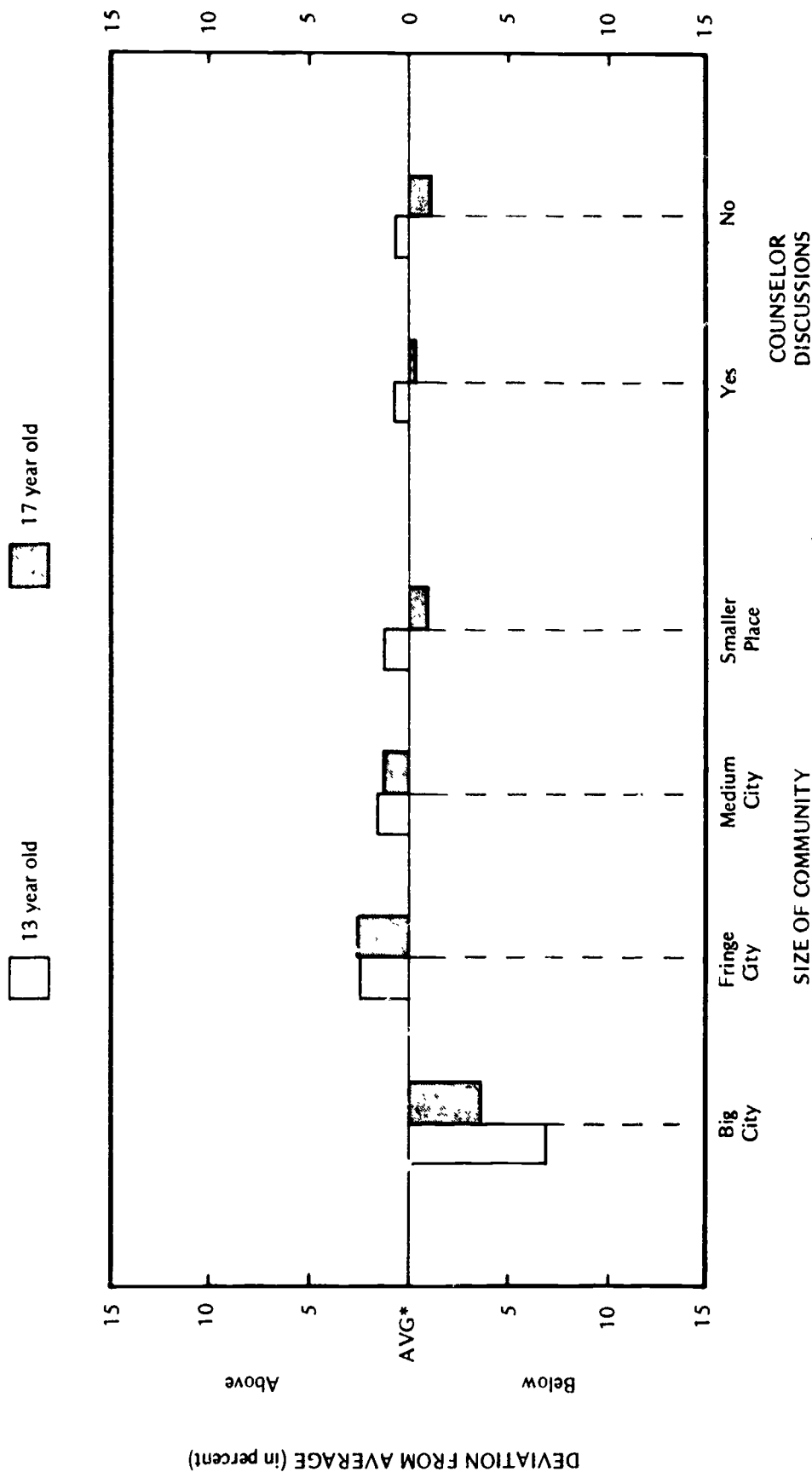
*AVERAGE SCORES: 13 yr. olds — 61.1%;   17 yr. olds — 47.6%

DEVIATION FROM AVERAGE (in percent)

146

CONTENT DOMAIN 212 LIFE EXPERIENCES

Overall Content Domain

Overall performance for this content domain was on the high end of the medium range, since the students averaged 54.3% correct answers. For this content domain, the 13 year olds did better than the 17 year olds (61.1% compared to 47.6%). The questions were different for the two age groups, and on the whole, the 17 year old questions were harder. It is difficult to generalize as to how well the students did in relating life experiences to career choices.

Demographic Variations

The overall pattern of demographic variations for this content domain is similar to that of most of the other domains, with the exception of the sex data for the 17 year olds. It is usual for girls to get higher scores than boys, but here the girls got lower scores for four of the six questions.

Individual Questions

Questions 37, 38 and 39 for 13 year olds are based on the story about Frank, who wants to change his career. Question 38 was fairly easy (75.2% correct answers), but questions 37 and 39 posed problems. The students were evenly divided on both questions between "very likely" and "somewhat likely", in question 37 as to whether he would study to become an engineering technician and in question 39 as to whether he would study auto mechanics in trade school. Evidently they were not able to perceive the clues in the story that would have lead them to the correct answers. There is nothing in the demographics that aids our understanding. Questions 40, 41 and 42 are about Marie, a singer who loses her singing voice. The students did a good job with these questions.

The 17 year old questions were arranged in a similar format. There were three questions about a lawyer who had to find less demanding employment and a flyer who had to find a job that did not require good vision. They did well on four of the six questions, and the other two are discussed in the next paragraph.

Exceptionally Hard or Easy Questions

For 13 year olds, question 41 was very easy, as the occupation
suggested (nurse) was unrelated to any element of the story. For
17 year olds, question 43 (substitute law teacher), the students were
split between "very appropriate" and "somewhat appropriate". Either
the clues in the story were inadequate or the students are not
sufficiently familiar with the job demands of a substitute law
teacher. Question 46 (manager of a large municipal airport) gave
the students trouble. They did not perceive that the skills of a
pilot, which require knowledge of navigation, aircraft mechanics,
airline operating procedures, etc., are not directly transferable
to the job of airport manager, which involves hiring and supervising
people, awarding construction contracts, negotiating with tenants
and vendors, dealing with municipal authorities and media, etc.

213   RELATIONSHIPS BETWEEN SCHOOL SUBJECT AREAS AND OCCUPATIONS IN PREPARING
      AN EDUCATIONAL PLAN.

IN EACH OF THE FOLLOWING PARAGRAPHS, YOU ARE GIVEN INFORMATION ABOUT A
STUDENT. FROM THE INFORMATION GIVEN, SELECT THE MOST APPROPRIATE CAREER
PLAN FOR EACH STUDENT BY MARKING AN "X" IN ONE OF THE SPACES PROVIDED.

43.   Bob is a friendly eighth grade boy who gets average marks. He works
      fairly hard and finds that he has some trouble with science and math
      courses. He doesn't like the practical arts courses. His best
      grades are in communications courses, and he likes public speaking.
      The high school program he has outlined includes many communications
      courses and some business courses. These courses would suggest that
      Bob is seriously thinking about becoming:

      1 **26.4** an author

      ② **60.1** a salesman

      3 **9.7** a designer

      4 **2.6** a druggist

44.   John and his counselor have agreed that John should give serious
      consideration to engineering as a career objective. To attain this
      goal, John should plan to take and do well in:

      1 **7.2** fine arts and social studies

      ② **61.2** science and mathematics

      3 **12.0** foreign languages and communications skills

      4 **18.4** practical arts and fine arts

45.   Mary is an eighth grade girl who has performed well in communications
      and mathematics classes. She likes to work with words and has a good
      memory. Her folks have taken her on a number of trips and she thinks
      she would like to become an interpreter and work in a foreign country.
      A school program that would take advantage of her interests and abili-
      ties and would help her plans would include:

      ① **51.7** social studies, communications, and foreign language

      2 **24.3** mathematics, foreign language, and social studies

      3 **5.6** science, social studies, and mathematics

      4 **16.7** communications, foreign language, and fine arts

213 RELATIONSHIPS BETWEEN SCHOOL SUBJECT AREAS AND OCCUPATIONS IN PREPARING AN EDUCATIONAL PLAN. (CONTINUED)

46. Helen took a course in career planning. She learned that her most promising fields were (1) Commerce and Trade and (2) Health, Family and Public Welfare. She considered a number of occupations and chose the following as her most promising: secretary, bookkeeper, and salesperson. Which one of the following education plans is most realistic for Helen?

    1 7.6 a high school and four-year college program with concentration on math and science courses

    2 34.0 a high school and four-year college program with concentration on communication and business courses

    ③ 51.4 a high school and two-year college program with concentration on business and communications courses

    4 5.9 a high school and two-year college program with concentration on social studies and science courses

213 RELATIONSHIP BETWEEN SCHOOL SUBJECT AREAS AND OCCUPATIONS IN PREPARING
     AN EDUCATIONAL PLAN

IN EACH OF THE FOLLOWING PARAGRAPHS, YOU ARE GIVEN INFORMATION ABOUT A
STUDENT. FROM THE INFORMATION GIVEN, SELECT THE MOST APPROPRIATE CAREER
PLAN FOR EACH STUDENT BY MARKING AN "X" IN ONE OF THE SPACES PROVIDED.

48. Tom is in his senior year of high school. His school record shows
    much success in industrial arts subjects. His math courses have
    been above average. He has had trouble with reading and writing
    subjects. He does not feel very happy with his record in social
    studies and science. Tom's school record suggests that his post
    high school plans should include:

    1 _19.1_ business college

    ② _66.3_ apprenticeship

    3 _12.6_ four-year college

    4 _1.6_ no training

49. Mary is a high school junior. She is taking as many courses as she
    can in social studies and communications skills. Anthropology and
    sociology were her favorite subjects. After high school, she plans
    to follow the same educational pattern in a four-year college. This
    educational plan will help her prepare for a position as a:

    1 _17.7_ nurse

    2 _12.0_ stewardess

    3 _4.7_ clerk-typist

    ④ _64.0_ probation worker

50. A student is giving serious thought to studying to be either a
    psychologist or a college history professor. To achieve either goal,
    the student must complete an educational plan that will include:

    1 _8.6_ communications skills and science at high school, college and
            post graduate levels

    2 _17.8_ social studies and communications skills at high school and
            college levels

    3 _4.5_ science and mathematics at high school and college levels

    ④ _67.8_ communications skills and social studies at high school, college,
            and post graduate levels

21₃   RELATIONSHIP BETWEEN SCHOOL SUBJECT AREAS AND OCCUPATIONS IN PREPARING
       AN EDUCATIONAL PLAN   (CONTINUED)

51.   Mary is a senior. She is taking English, French, World History,
      Speech, and Art. She does very well in English, especially literature.
      Her French is good and she does well in speech. With this pattern of
      abilities, she should give consideration to becoming:

      1 __6.1__ an archeologist

      2 __2.2__ an accountant

      ③ __54.7__ a newspaper reporter

      4 __36.1__ a social worker

52.   John has outlined a course that includes many mathematics and fine
      arts (art) classes. These are also his best classes. He plans two
      years training beyond high school. This program will prepare him as:

      1 __9.4__ an artist

      ② __47.5__ a draftsman

      3 __3.4__ a teacher

      4 __38.9__ an architect

TABLE 6.3.17 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN (N 213 -- SCHOOL SUBJECT AREAS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	43	44	45	46
CONNECTICUT	56.1	60.1	61.2	51.7	51.4
SEX					
Female	56.7	60.8	59.4	52.6	54.2
Male	55.4	59.3	63.2	50.6	48.4
SIZE OF COMMUNITY					
Big City	42.6	46.9	44.6	37.7	41.4
Fringe City	62.6	67.8	68.3	58.3	55.6
Medium City	56.6	58.8	63.2	53.2	51.3
Smaller Place	59.9	64.4	65.2	55.0	55.2
CAREER GUIDANCE OR EDUCATION					
Yes	52.7	61.4	58.0	45.0	46.6
No	57.2	60.0	62.5	53.6	52.9
COUNSELOR DISCUSSIONS					
Yes	56.3	60.5	62.7	51.7	50.3
No	58.0	62.1	62.9	53.9	53.1
Don't Remember	43.6	46.9	46.8	37.2	43.7
PLANNING VOC-TECH SCHOOL					
Yes	47.8	46.4	56.6	44.5	43.8
No	59.7	64.2	64.6	55.3	54.6
Undecided	54.0	59.6	58.6	48.5	49.4
JOB DECISION					
Yes	55.6	59.5	60.2	51.3	51.5
No	57.3	61.8	63.6	52.5	51.2

QUESTION NUMBER (SEE PRECEEDING FIGURE)

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.18 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 213 -- SCHOOL SUBJECT AREAS
(IN PERCENT)

	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
DEMOGRAPHIC CATEGORY		48	49	50	51	52
CONNECTICUT	60.1	66.3	64.0	67.9	54.7	47.5
SEX						
Female	62.4	65.1	69.5	70.1	57.9	49.3
Male	57.6	67.5	57.9	65.6	51.4	45.6
SIZE OF COMMUNITY						
Big City	53.5	53.4	55.4	60.5	53.4	44.7
Fringe City	64.5	67.6	70.2	74.2	59.3	51.1
Medium City	59.4	69.5	62.6	67.3	50.4	47.2
Smaller Place	61.4	71.4	65.8	67.9	55.4	46.6
CAREER GUIDANCE OR EDUCATION						
Yes	57.0	67.2	58.1	63.3	51.4	44.8
No	61.3	65.9	66.4	69.7	56.0	48.5
COUNSELOR DISCUSSIONS						
Yes	62.6	68.3	66.6	71.0	57.4	49.7
No	56.3	62.8	61.2	64.0	50.4	42.9
Don't Remember	51.1	61.6	51.6	52.6	46.3	43.5
WORK EXPERIENCE						
Regular Job	62.0	70.4	65.7	69.4	55.4	49.3
Summer Job	58.8	62.1	64.0	66.3	55.0	46.7
Not Worked	60.1	63.8	62.3	71.7	54.7	47.8
Work Study	54.2	65.6	58.8	57.4	51.2	37.9
JOB DECISION						
Yes	60.0	66.9	62.8	68.7	54.0	47.6
No	60.2	65.2	66.3	66.2	56.2	47.2

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.27

DEVIATION FROM AVERAGE PERFORMANCE SCORES
BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 213 -- SCHOOL SUBJECT AREAS
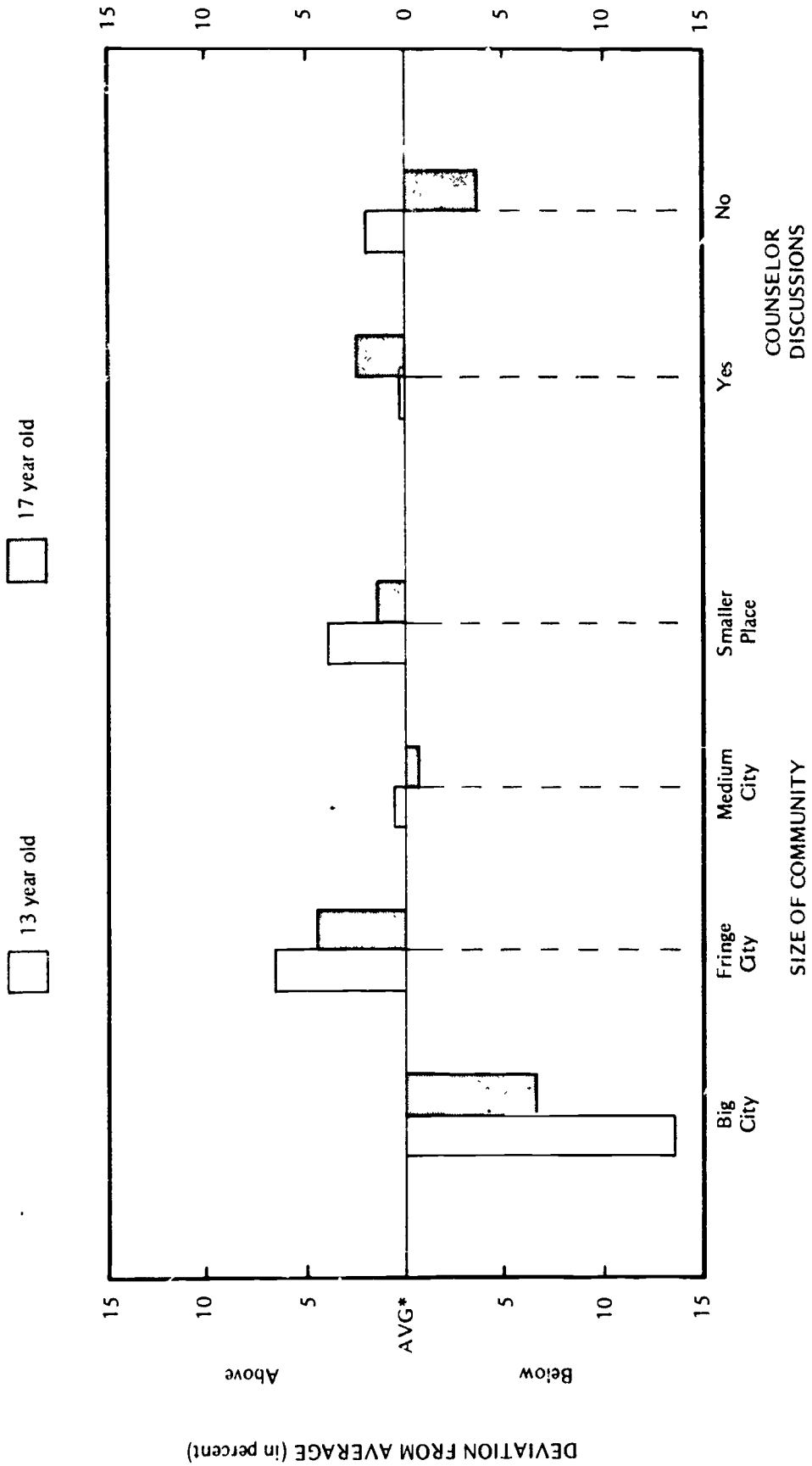
*AVERAGE SCORES: 13 yr. olds — 56.1%;   17 yr. olds — 60.1%

CONTENT DOMAIN 213 SCHOOL SUBJECT AREAS

Overall Content Domain

Overall performance for this content domain was on the high side, averaging 58.1%, with 13 year olds scoring 4.0% lower than 17 year olds. These average scores represent the scores of the individual items rather well, since the spread was small, only 9.8% for 13 year olds and 20.3% for 17 year olds. In general, it can be concluded that both 13 and 17 year olds understand the relationship between school subjects and career objectives fairly well.

Demographic Variations

Although average performance patterns for this domain, for both age groups, were generally similar to those for the test as a whole, with the demographic variables, several of the expected variations in SOC were considerably larger than usual. Thirteen year old big city students scored almost 14% below the domain average, 17's were 7% lower. Fringe city students averaged 6% higher than the average. In general this domain seemed to be more sensitive than most to the differences in population groups.

Exceptionally Hard or Easy Questions

For 13 year olds, all four questions must be considered to be of average difficulty. From 51.4% to 61.2% of the students selected the correct answers. However, only 51.4% of the students selected the correct answer to question 46 (high school and two-year college as preparation for a job as secretary, bookkeeper or salesperson), while 34.0% selected an incorrect answer (high school and four-year college). It is surprising that so many students regard college as a realistic educational plan for such jobs. This might reflect something other than naivete, namely knowledge of past sexist employment practices. Many college educated women have been offered only secretarial jobs.

For 17 year olds, too, all four questions were of average difficulty. From 47.5% to 67.8% of the students selected the correct answers. But, only 47.5% selected the correct answer to question 52 (draftsman), while 38.9% selected an incorrect answer (architect) that is quite inappropriate. The question specifies two years training beyond high school. To become an architect requires four years of college and three years of professional school.

221 IDENTIFYING CAREER ALTERNATIVES THAT ARE CONSISTENT WITH ABILITIES

AND INTERESTS

IN EACH OF THE FOLLOWING PARAGRAPHS YOU ARE GIVEN INFORMATION ABOUT A
STUDENT. FROM THE INFORMATION GIVEN, YOU ARE TO SELECT THE MOST APPROPRIATE
CAREER POSSIBILITIES FOR EACH STUDENT BY PLACING AN "X" IN ONE OF THE
SPACES PROVIDED.

47. Mary is an excellent student. She plays a violin in the school band
     and shows good taste in clothes that she makes. She receives A's and
     B's in communications, fine arts, and social studies. She is less
     successful in science and mathematics. She expresses interest in
     writing, in all artistic activity, and in being with people. She
     dislikes mathematics and has neutral feelings about science. She has
     given her future considerable thought. She plans to finish high
     school and go to college to prepare for one of two occupations. Which
     pair of occupations do you feel fit most closely to Mary's pattern of
     abilities and interests?

     1 __30.1__ society editor and technical writer

     2 __7.2__ chemist and biologist

     ③ __54.9__ musical director and art critic

     4 __5.9__ statistician and accountant

48. Jan's mother wanted her to be a music teacher when she finished school.
     Jan wasn't sure. Her marks were in the C range with more D's than B's.
     She liked singing, working with people, taking notes and keeping records.
     She was able to spell accurately and had good finger dexterity. She
     planned to take as many business and communication courses as she could
     in high school. Her best occupational objectives would seem to be:

     1 __36.2__ music teacher or choir director

     ② __46.9__ typist or secretary

     3 __8.9__ nurse or social worker

     4 __6.3__ librarian or dietitian

221 IDENTIFYING CAREER ALTERNATIVES THAT ARE CONSISTENT WITH ABILITIES
         AND INTERESTS (CONTINUED)

49. Frank is an eighth grade student. At the present time, he is planning
     on being a doctor. He has just completed a career planning program.
     He has learned that he has abilities and interest in mathematics and
     scientific activities. He has interests in the arts but not much
     artistic ability. His reading skills are average and he has average
     skills in working with people. He has been asked to identify some
     alternative occupations to consider in case the medical plans don't
     work out and he decides not to attend a four year college. Some
     occupations are:

     ① 39.6 X-ray technician, chemical technician, and engineering assistant

     2 40.0 chemist, physicist, and accountant

     3 1.2 teacher, social worker, and clergyman

     4 5.5 nurseryman

50. John told his counselor that he knew what he was going to do for a
     living. He was going to be a baseball player. His counselor asked
     him what he planned to do on the off season and after he was too old
     to play ball. John realized he needed an alternate plan. He recognized
     that school didn't appeal much to him so he didn't plan to go far
     beyond high school. He enjoyed being with people and he had average
     mathematics and communications skills. He could talk people into
     doing things his way without making them angry. He was "all thumbs"
     when working with mechanical devices. From this information it appears
     he should explore which two occupations:

     ① 32.3 life insurance salesman and real estate salesman

     2 6.8 tool and die maker and machinist

     3 51.9 baseball coach and school counselor

     4 6.2 building contractor and engineer

51. George is a high school senior who has had trouble with social studies
     and communications subjects. He has always enjoyed working with
     mechanical objects and he has performed well in shop classes. His
     hobbies have included making model cars and airplanes and tearing down
     and repairing motors. He can work most problems in general math and
     algebra but hasn't tried advanced math. His career plans might include
     such jobs as:

     1 48.1 engineer, draftsman, and architect

     2 5.0 orderly, porter, custodian

     3 15.6 electronic assembler, ranch hand, stock clerk

     ④ 28.5 mechanic, plumber, pattern maker

221   IDENTIFYING CAREER ALTERNATIVES THAT ARE CONSISTENT WITH ABILITIES
         AND INTERESTS

IN EACH OF THE FOLLOWING PARAGRAPHS YOU ARE GIVEN INFORMATION ABOUT A
STUDENT.   FROM THE INFORMATION GIVEN, YOU ARE TO SELECT THE MOST APPROPRIATE
CAREER POSSIBILITIES FOR EACH STUDENT BY PLACING AN "X" IN ONE OF THE
SPACES PROVIDED.

53.   George is a high school senior who has had trouble with social studies
      and communications subjects.   He has always enjoyed working with
      mechanical objects and he has performed well in shop classes.   His
      hobbies have included making model cars and airplanes and tearing down
      and repairing motors.   He can work most problems in general math and
      algebra but hasn't tried advanced math.   His career plans might
      include such jobs as:

      1 **26.8** engineer, draftsman, and architect

      2 **2.3** orderly, porter, custodian

      3 **5.7** electronic assembler, ranch hand, stock clerk

      ④ **64.2** mechanic, plumber, pattern maker

54.   Linda studied her school record and interest and ability test scores.
      She found that she had excellent math and science skills, that she
      enjoyed outdoor activities and had strong interests in social service,
      science, and artistic activities.   Her communication skills were not
      outstanding and she disliked sales and verbal activities.   Reasonable
      career plans for Linda could include:

      1 **21.0** accountant, author, chemist

      ② **68.0** geologist, oceanographer, botanist

      3 **5.5** author, actor, teacher

      4 **4.0** librarian, clergyman, realtor

55.   Fred's school record shows many C's, and few B's, and no A's or D's.
      He is slightly above average.   He works better with people than with
      things or data.   He likes mechanical, artistic, and computational
      activities and is good at handling details.   He would be expected to
      be successful if he will explore occupations including the following:

      ① **46.0** accounting-clerk, cashier, bank teller

      2 **22.2** nurse, social worker, counselor

      3 **15.9** secretary, receptionist, salesperson

      4 **14.1** hospital orderly, porter, hotel bell captain

221 IDENTIFYING CAREER ALTERNATIVES THAT ARE CONSISTENT WITH ABILITIES
AND INTERESTS (CONTINUED)

56. Lisa has an excellent school record. Her greatest strengths are in
fine arts and communications skills. Her hobbies include drawing,
making up poems, and reading. She sings in the school chorus. Her
other interests include helping people. From the groups of occupations
listed below, pick the group that might be best suited for Lisa:

① 91.2 art critic, writer, artist

2 3.1 chemist, engineer, physician

3 3.1 architect, physicist, mathematician

4 1.6 designer, tool and die maker, draftsman

TABLE 6.3.19 - PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 221 -- ABILITIES AND INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		47	48	49	50	51
CONNECTICUT	40.4	55.0	46.8	39.6	32.3	28.5
SEX						
Female	41.5	57.4	46 9	39.1	30 5	28.8
Male	40.3	52.2	46	40.0	34 2	28 4
SIZE OF COMMUNITY						
Big City	35.1	47 4	38.6	39.0	26.3	24.1
Fringe City	41.3	55.8	52.0	35 6	35.1	28.0
Medium City	42.0	58.2	47 0	41.8	31.1	31.7
Smaller Place	42.2	56.9	48.4	41.3	35.3	29.3
CAREER GUIDANCE OR EDUCATION						
Yes	38.3	49.8	43.8	38.1	30.1	29.5
No	41.1	56.3	47.9	40.2	33.0	28.3
COUNSELOR DISCUSSIONS						
Yes	40.2	50.2	49.4	42.7	30.2	28 ?
No	41.6	57.8	47 5	39.3	34.1	29.3
Don't Remember	33.3	47.5	35.4	34.1	27.7	21.9
PLANNING VOC-TECH SCHOOL						
Yes	39.3	51.3	43.5	42.9	28.8	29.8
No	40.7	55.7	47.6	39.3	32 9	28.2
Undecided	40.4	54.9	47.5	38.9	32.5	28.0
JOB DECISION						
Yes	40.2	53.4	46.3	40.9	31.9	28.5
No	40.7	57.1	48.1	37.5	33.1	27.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.20 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 221 -- ABILITIES AND INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)			
		53	54	55	56
CONNECTICUT	67.4	64.2	68.0	46.0	91.2
SEX					
Female	67.9	61.0	71.5	46.7	92.6
Male	66.8	67.8	64.3	45.2	89.9
SIZE OF COMMUNITY					
Big City	62.3	58.0	60.6	42.6	88.0
Fringe City	69.5	69.2	69.2	46.2	93.6
Medium City	67.1	64.0	66.7	47.0	90.9
Smaller Place	69.2	64.3	73.4	47.4	91.7
CAREER GUIDANCE OR EDUCATION					
Yes	65.1	62.7	63.1	43.3	91.3
No	68.2	64.8	69.8	47.0	91.4
COUNSELOR DISCUSSIONS					
Yes	69.6	66.9	71.4	47.4	92.7
No	64.5	59.7	64.0	44.4	90.0
Don't Remember	57.2	56.6	51.2	38.6	82.6
WORK EXPERIENCE					
Regular Job	69.3	68.1	70.4	47.6	91.2
Summer Job	66.5	63.1	66.8	44.3	91.8
Not Worked	65.6	57.0	69.6	44.5	91.4
Work Study	64.7	61.2	57.6	45.7	94.5
JOB DECISION					
Yes	66.9	63.0	67.3	45.6	91.9
No	68.2	66.5	69.2	46.9	90.4

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.30

DEVIATION FROM AVERAGE PERFORMANCE SCORES

BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 221   ABILITIES AND INTERESTS
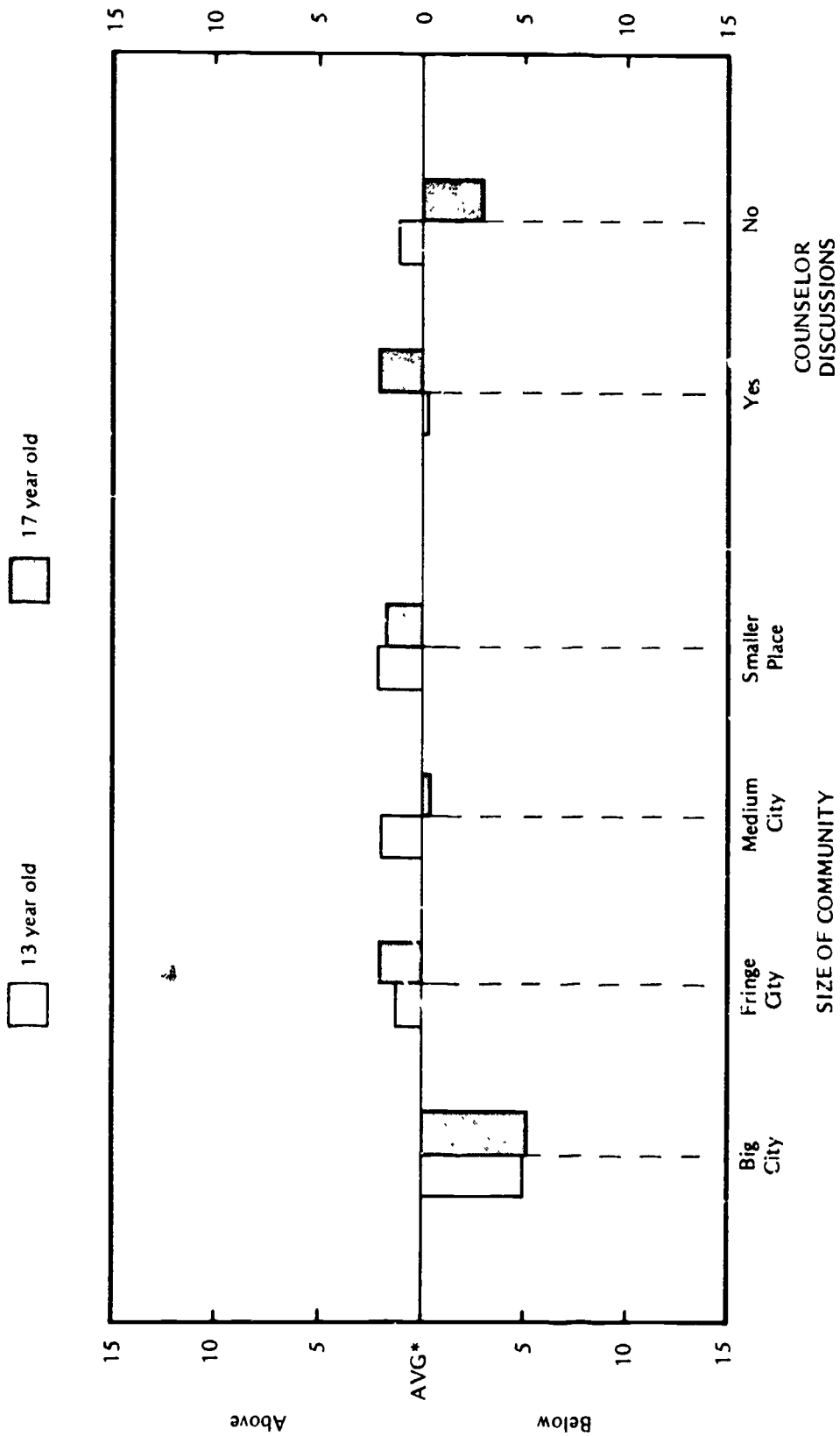
*AVERAGE SCORES: 13 yr. olds — 40.4%,   17 yr. olds — 67.4%

CONTENT DOMAIN 221   ABILITIES AND INTERESTS

Overall Content Domain

Overall performance for this content domain was on the high side for
17 year olds, who averaged 67.4% correct answers, but only average
for 13 year olds, who averaged only 40.4% correct answers.

These averages do not tell the whole story, since the 13 year olds
found their five items too difficult for them, while the 17 year
olds did fairly well on all four of their items. In general, we can
conclude that 17 year olds can identify career alternatives that
are consistent with abilities and interests, but that 13 year olds
have difficulty making a judgment which requires weighing several
factors.

Demographic Variations

For the 17 year olds, there is little about the demographic varia-
tions that is of interest. The exception is their response to
question 53, which is discussed below. For the 13 year olds,
questions 49, 50 and 51 were too difficult for them, and some demo-
graphic groups did better than others. The pattern is a surprising
one, in that it differs from that of most of the other items. The
girls did not do as well on these three questions as we would expect.
For question 49, the students from Fringe Cities did not do as well
as would expect.

Individual Questions

For the 17 year olds, questions 54, 55 and 56 merit little comment,
except that it is obvious in question 56, that the distractors are
not working. Question 53 for the 17 year olds (which is identical
with question 51 for the 13 year olds) is worth comment. The question
hints that George does not intend to go to college. Thus, the correct
answer is "mechanic, plumber, pattern maker" rather than the tempting
"engineer, draftsman, and architect" which depend on the same skills
and interests, but require a college education. The 17 year olds
understood the subtleties of this question, 64.2% selected the correct
answer and only 26.8% selected the tempting wrong answer. However,
it was surprising that boys did better than girls - by 67.8% to 61.0% -
as in most other questions the reverse was the case.

Exceptionally Hard or Easy Questions

As noted above, the 17 year olds did fairly well on all of their
questions on this content domain. But the 13 year olds had trouble
with every question. For their questions 47 and 48, the largest
group of students selected the correct answers, but a group almost
as large selected another answer. For their questions 49, 50 and 51,
the largest group of students selected the wrong answers. In each
question, the reason so many students selected the wrong answer was
that they failed to take into account that the person in the question
was not going to college and that the occupations they selected
required college educations. Question 51 for 13 year olds (which
is identical with question 53 for 17 year olds) is the most
interesting case to comment on. The question hints that George
is not going to college, but doesn't come right out and say it.
The more mature 17 year olds perceived the hints and, as a group,
answered the question well. The less mature 13 year olds were
not able to perceive and evaluate these hints and did badly.
Question 56 for 17 year olds was obviously too easy (91.2% correct);
the distractors had nothing in common with the abilities and interests
of the student depicted, and drew only a negligible response.

222   STEPS IN CAREER PLANNING

More than one decision is needed to choose a career. Some of these
decisions are shown below in mixed up order. First read all the
decisions. Then, in the space provided next to each decision place a
number from one to seven to indicate your choice as to which decision
should be made first (write in a "1"), which decision should be made
second (write in a "2"), etc.

	DECISION	ORDER	CORRECT ORDER
52.	Take action on your plans.	10.9%	5
53.	Choose among alternative plans or goals.	16.3	4
54.	Define the problem.	30.8	1
55.	Review your plan periodically.	19.6	6
56.	Gather relevant information.	29.0	2
57.	Weigh the evidence gathered.	24.1	3
58.	Revise plans and actions when required.	23.2	7

222 STEPS IN CAREER PLANNING

THE FOLLOWING QUESTIONS ARE BASED ON CONTINUING INFORMATION PRESENTED
ABOUT A STUDENT.

57. John is a twelve year old junior high school student who says that
     he wants to be an engineer. Would you say that he would be success-
     ful as an engineer?

     1 _7.7_ Likely to succeed

     2 _22.1_ Might succeed

     3 _4.6_ Not likely to succeed

     ④ _65.3_ More information needed

58. John is now 14 and entering high school. He still maintains that
     he wants to be an engineer because he likes mechanical things and
     wants to be able to be creative, and is enrolling in mathematics
     and scie͏̈ e courses. Would you say that he would be successful
     as an engineer?

     1 _18.4_ Likely to succeed

     2 _64.0_ Might succeed

     3 _3.7_ Not likely to succeed

     ④ _13.5_ More information needed

59. John is now 15 1/2 and in his sophomore year. His grades are always
     above average in all areas with the exception of math and science,
     where they are average. He feels that he can do better work if he
     "works harder". Would you say that he would be successful as an
     engineer?

     1 _17.3_ Likely to succeed

     2 _54.1_ Might succeed

     3 _25.0_ Not likely to succeed

     ④ _3.2_ More information needed

17 Year Olds

222   STEPS IN CAREER PLANNING   (CONTINUED)

60.   John is now 16 1/2 and in the second semester of the junior year.
      His grade point average is well above average, but his grades in
      math and science are average to below average. On a recent aptitude
      test John scored very high in literary, verbal usage, and reading
      comprehension areas. He scored low in mechanical reasoning, spatial
      relations, mathematical computation and science. He still maintains
      that he intends to major in engineering in college. Would you say
      that he would be:

      1 **66** Likely to succeed

      2 **22.6** Might succeed

      ③ **69.0** Not likely to succeed

      4 **1.4** More information needed

61.   John is now 17 1/2 and in his senior year of high school. He has taken
      the scholastic aptitude test and scored in the top ten percent in the
      verbal area, but in the bottom thirty percent in mathematics. He says
      that he received the high score on the verbal SAT because of his interest
      in journalism and the four years that he has spent working on the school
      paper. He has also been active in drama and debate. However, he still
      plans to major in engineering. Would you say that he would be:

      1 **66** Likely to succeed

      2 **15.1** Might succeed

      ③ **76.3** Not likely to succeed

      4 **1.5** More information needed

62.   John is now a sophomore at the State University. He is currently
      enrolled in a liberal arts course, having switched from the school
      of engineering after his first semester. He is active on the debate
      team, campus student government organization, and now talks about
      majoring in government with a possible pre-law major and eventually
      law school. Would you say that he would be:

      ① **66.0** Likely to succeed

      2 **22.7** Might succeed

      3 **7.2** Not likely to succeed

      4 **3.4** More information needed

222   STEPS IN CAREER PLANNING   (CONTINUED)

YOUR RESPONSES TO THE FOLLOWING QUESTIONS SHOULD BE BASED ON THE INFORMATION
GIVEN IN THE PRECEDING STORY ABOUT JOHN.   MARK ONLY ONE ANSWER FOR EACH
QUESTION.

63.   What motivated John to express an interest in engineering?

① 73.0 His interests

2 15.9 His values

3 10.2 His abilities

64.   With respect to his future plans, what did John fail to do?

1 5.7 Plan his future choice of an occupation

2 6.8 Make a decision on what he was going to do

3 23.0 Implement his decision (do something that would lead toward his goal)

④ 63.6 Evaluate his continuing progress in relation to his expressed plans

65.   What did John fail to evaluate adequately in his career planning?

1 8.7 His interests

2 9.5 His values

③ 80.7 His abilities

TABLE 6.3.21 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLOS CONTENT OOMAIN 222 -- STEPS IN PLANNING (IN PERCENT)

QUESTION NUMBER (SEE PRECEEOING FIGURE)

OEMOGRAPHIC CATEGORY	OOMAIN AVERAGE	52	53	54	55	56	57	58
CONNECTICUT	22.0	10.9	16.3	30.8	19.6	29.0	24.1	23.2
SEX								
Female	22.5	10.7	16.3	31.4	19.8	29.9	24.7	24.4
Male	21.6	11.2	16.3	30.4	19.5	28.1	23.6	22.0
SIZE OF COMMUNITY								
Big City	16.0	8.1	13.1	18.5	15.1	19.4	16.3	21.4
Fringe City	23.6	12.9	18.5	36.3	20.2	29.8	25.3	22.0
Medium City	23.2	12.5	16.7	32.0	18.0	32.4	27.5	23.0
Smaller Place	23.9	9.8	16.3	34.2	23.7	32.2	25.7	25.6
CAREER GUIOANCE OR EDUCATION								
Yes	21.2	10.5	15.3	28.5	20.6	27.3	22.7	23.4
No	22.4	11.2	16.5	31.9	19.7	29.6	24.6	23.3
COUNSELOR OISCUSSIONS								
Yes	22.8	10.9	17.5	30.6	20.3	30.3	24.7	25.4
No	22.7	11.9	16.5	32.4	20.3	30.1	25.1	22.8
Oon't Remember	15.8	5.9	10.5	22.2	15.0	20.1	17.9	19.2
PLANNING VOC-TECH SCHOOL								
Yes	17.7	10.6	15.8	21.7	18.1	22.9	15.4	19.3
No	23.5	11.0	18.0	32.3	21.1	31.2	26.0	24.6
Undecided	21.8	11.3	13.9	32.4	18.7	28.7	25.1	22.7
JOB OECISION								
Yes	21.6	10.5	16.2	28.6	18.9	29.3	24.4	23.3
No	22.9	12.1	15.9	34.9	21.2	29.1	24.3	23.1

NOTE: For the full text of the demographic questions see Section III -- Sample Oesign

TABLE 6.3.22 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 222 -- STEPS IN PLANNING
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)								
		57	58	59	60	61	62	63	64	65
CONNECTICUT	56.8	65.3	13.5	3.2	69.0	76.3	66.0	73.0	63.7	80.7
SEX										
Female	58.5	67.8	12.0	2.7	71.1	78.1	69.8	74.5	67.3	83.2
Male	55.0	62.8	15.2	3.8	66.9	74.5	61.9	71.6	60.0	78.1
SIZE OF COMMUNITY										
Big City	50.0	57.8	12.3	4.2	58.7	66.2	60.2	67.5	52.2	71.2
Fringe City	60.0	67.2	14.6	2.3	77.3	82.3	65.7	73.4	71.4	85.4
Medium City	57.2	69.1	13.7	2.9	68.6	75.3	67.7	73.6	61.4	82.3
Smaller Place	56.2	65.4	13.3	3.7	69.3	79.0	68.7	76.1	66.9	81.7
CAREER GUIDANCE OR EDUCATION										
Yes	54.1	63.5	13.7	2.7	65.8	73.3	61.6	69.6	58.7	77.8
No	57.9	66.2	13.3	3.4	70.4	77.5	67.8	74.5	65.8	82.0
COUNSELOR DISCUSSIONS										
Yes	59.2	66.6	13.6	3.0	71.8	80.8	70.0	74.5	68.2	84.1
No	53.7	63.6	13.7	3.1	65.5	69.8	60.6	72.2	58.0	76.9
Don't Remember	45.8	60.1	10.9	5.1	57.3	59.4	48.8	62.7	44.1	63.9
WORK EXPERIENCE										
Regular Job	58.9	67.9	14.5	3.2	71.7	79.0	69.4	73.8	66.7	83.5
Summer Job	55.3	62.9	13.6	3.6	67.1	73.7	64.8	71.7	62.2	78.3
Not Worked	56.7	66.3	11.5	1.8	69.6	75.8	66.5	73.0	66.4	79.8
Work Study	53.9	64.1	9.7	4.9	63.7	78.6	50.8	79.0	53.6	80.4
JOB DECISION										
Yes	56.3	63.3	13.0	3.2	68.3	76.5	65.6	74.0	62.4	80.5
No	57.7	69.4	14.2	3.0	70.6	76.1	66.8	71.4	66.3	81.2

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.33

DEVIATION FROM AVERAGE PERFORMANCE SCORES

BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 222 - STEPS IN PLANNING
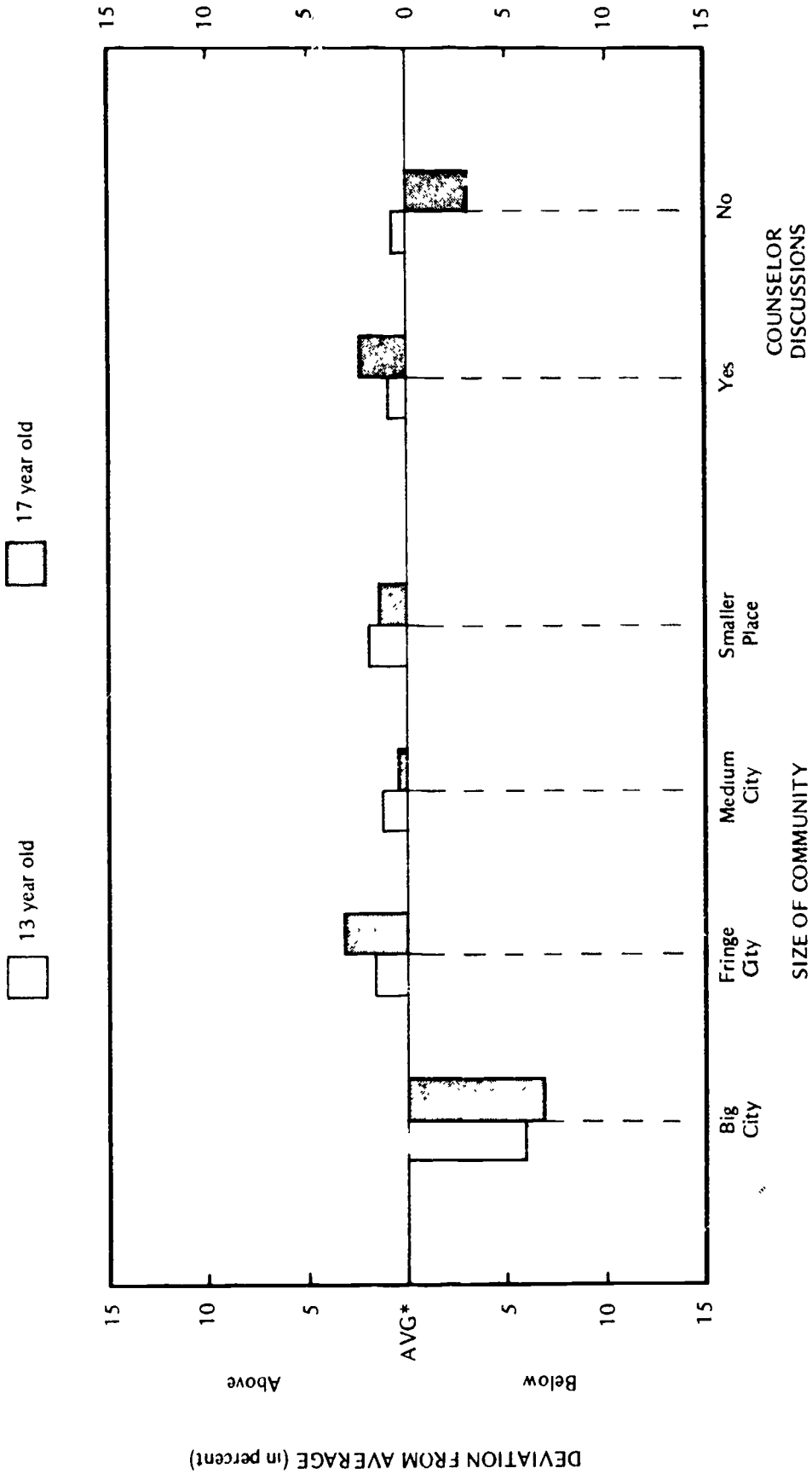
*AVERAGE SCORES: 13 yr. olds — 22.0%;   17 yr. olds — 56.8%

CONTENT DOMAIN 222   STEPS IN PLANNING

Overall Content Domain

Overall performance for this content domain was on the high side
for 17 year olds, who averaged 56.7% correct answers, but very low
for 13 year olds, who averaged only 22.0% correct answers. In
general, we can conclude that the 17 year olds understand the idea
of the steps in career planning fairly well, but that the 13 year
olds simply do not understand the basic idea.

Demographic Variations

There is little about the demographic variations that is of interest.

Individual Questions

The 17 year olds did very well on 7 of the 9 questions, and demon-
strated their basic understanding of the steps in career planning.
Their answers to the other two questions will be discussed below.
The 13 year olds found both the questions and ideas difficult, and
we will discuss both topics together in the next paragraph.

Exceptionally Hard or Easy Questions

The 17 year olds found questions 58 and 59 difficult. For question
58, the largest group of 17 year olds (64.0%) felt that John
"might succeed", and the next largest group (18.4%) felt that he
was "likely to succeed". The point of the question was that
interest and desire are not enough for career planning, and that
you must know something about abilities and work habits. For
question 59, the students repeated their mistakes of question 58.
They are confronted with the information that George's grades in
math and science are average, but that he intends to "work harder".
Yet, only 3.2% of them realized they needed more information.
These questions were hard for students in all of the demographic
groups. For example, the better students in the Fringe Cities did
only a little better than the Big City students on these two
questions. It is clear that these students fail to understand the
importance of demonstrated ability, in addition to interest and
desire, in career planning. But in trying to understand why so
many students failed to select the correct answer, we should

probably go beyond their knowledge of the subject matter and consider
the extent to which students are encouraged to guess in answering test
questions. It is common practice to encourage students to do the
best they can in answering test questions - to skip ones they can't
answer and to select the best answer even when they are not completely
sure.

The 13 year olds found all of their questions on this content domain
difficult. Our problem is to deduce how much of their difficulty
was due to the format of the questions and how much was due to their
lack of knowledge of the subject matter. Questions 52 to 58 are
really one question. The student is asked to tell us which steps
in career planning should be made first, second, third, etc. It
will help to show the questions in the sequence of the correct
answers:

| | Percent Correct Answers | |
Question	Big City Students	Fringe City Students
54	18.5	36.1
56	19.4	29.8
57	16.3	25.3
53	13.1	18.5
52	8.1	12.^
55	15.1	20._
58	21.4	22.0

The Fringe City students did better than the Big City students, and
by impressive margins for the first three questions (54, 56 and 57),
but they didn't do well, since 36.1% correct is not respectable. It
is likely that many of the 13 year olds didn't understand what they
were being asked to do, and that the brighter Fringe City students
were better at solving this puzzle. Since there are seven questions,
if all of the students were guessing they should get one-seventh
of them (14%) correct. The Big City students didn't do much better
than this, but the Fringe City students did. But many of them must
have been guessing, which suggests that they were seeing the steps
in career planning for the first time. It is hard to believe that
very many 13 year olds know anything about this content domain in
the face of these results.

224 SATISFACTION DERIVED FROM WORK

PLACE AN "X" IN ONE OF THE SPACES PROVIDED FOR WHAT YOU THINK IS THE
MOST APPROPRIATE ANSWER TO EACH QUESTION.

59. In which of the following occupations is a person most likely
     to receive public recognition and appreciation?

     1 19.1 Nurse

     2 18.8 Teacher

     ③ 55.8 Entertainer

     4 3.9 Truck driver

60. In which of the following occupations is a person most likely to
     be recognized for exceptional mastery and achievement?

     ① 64.5 Writer

     2 4.6 Barber

     3 19.5 Social worker

     4 8.9 Priest

61. In which of the following occupations is a person most likely to
     achieve a sense of belonging?

     1 8.9 Auto salesman

     2 13.6 Accountant

     3 31.1 Radio announcer

     ④ 43.5 Soldier

62. Which of the following occupations would provide a person with the
     greatest responsibility for controlling and directing others?

     1 52.0 Policeman

     ② 17.7 Ship's Captain

     3 14.7 Pe   nnel Manager

     4 12.8 La.

13 Year Olds

224 SATISFACTION DERIVED FROM WORK   (CONTINUED)

63. Which occupation would provide a person with the max. um opportunity for creativity?

    1 5.2 Clerk

    2 5.5 Laborer

    3 7.6 Assembly line worker

    ④ 79.3 Architect

64. Which occupation would probably provide a person with the highest income?

    1 12.8 Teacher

    2 56.4 Laboratory technician

    ③ 24.5 Civil Engineer

    4 3.8 Cook

65. Which occupation would probably provide a person with the most opportunity for the expression of personal values in his work?

    1 6.6 Laborer

    2 12.7 Laboratory technician

    ③ 61.5 Minister

    4 16.0 Engineer

66. Which of the following occupations would allow a person to be free from the care and worry involved in supervising others on the job?

    1 21.1 Foreman

    2 12.0 Director of operations

    3 24.6 Airline pilot

    ④ 39.4 Clerk

67. Which of the following occupations would provide a person with the most opportunity to directly help and serve others?

    1 3.4 Bricklayer

    2 5.9 Truck driver

    ③ 78.0 Social worker

    4 9.6 Carpenter

224 SATISFACTION DERIVED FROM WORK   (CONTINUED)

68. Which of the following occupations would allow a person to express the most creativity on the job?

   1 **5.6** Machinist

   2 **3.9** Accountant

   3 **7.2** Airline pilot

   ④**79.9** Industrial designer

69. Which of the following employers would provide an employee with the most regular (steady) income?

   1 **6.8** Farming

   ②**17.5** Civil Service

   3 **24.3** A small business

   4 **47.9** Large manufacturing corporation

70. Which of the following occupations would provide a person with the most independence on the job?

   ①**33.2** Teacher

   2 **18.1** Draftsman

   3 **37.0** Farm worker

   4 **8.2** Production line worker

224   SATISFACTION DERIVED FROM WORK

PLACE AN "X" IN ONE OF THE SPACES PROVIDED FOR WHAT YOU THINK IS THE
MOST APPROPRIATE ANSWER TO EACH QUESTION.

66.   Which occupation would probably provide a person with the highest income?

   1 __7.3__ Teacher

   2 __51.7__ Laboratory technician

   ③ __37.4__ Civil Engineer

   4 __2.6__ Cook

67.   Which of the following occupations would allow a person to be most
      free from the care and worry involved in supervising other workers
      on the job?

   1 __10.0__ Foreman

   2 __7.9__ Director of operations

   3 __33.4__ Airline pilot

   ④ __47.6__ Teacher

68.   Which of the following occupations would provide a person with the greatest
      responsibility for controlling and directing others?

   1 __31.3__ Policeman

   ② __32.3__ Ship's Captain

   3 __25.0__ Personnel Manager

   4 __10.1__ Lawyer

69.   Which of the following employers would provide an employee with the
      most regular (steady) income:

   1 __3.2__ Farming

   ② __27.4__ Civil Service

   3 __12.7__ A small business

   4 __55.0__ A large manufacturing corporation

70.   Which of the following occupations would provide a person with the
      most independence on the job?

   ① __28.6__ Teacher

   2 __19.1__ Draftsman

   3 __45.8__ Farm worker

   4 __4.7__ Factory production line worker

TABLE 6.3.23 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 224 -- SATISFACTION FROM WORK
(IN PERCENT)

QUESTION NUMBER (SEE PRECEEDING FIGURE)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	59	60	61	62	63	64	65	66	67	68	69	70
CONNECTICUT	49.6	55.8	64.5	43.5	17.6	79.4	24.5	61.6	39.4	78.0	79.9	17.5	33.2
SEX													
Female	51.5	53.6	67.5	46.7	13.4	82.8	24.0	65.5	42.0	81.7	84.1	17.5	38.8
Male	47.7	58.2	61.5	40.3	22.1	76.0	24.9	57.4	37.0	74.2	75.8	17.6	27.3
SIZE OF COMMUNITY													
Big City	38.9	40.1	45.8	40.5	13.8	58.9	27.4	42.7	26.8	62.8	59.0	16.3	32.7
Fringe City	53.4	62.1	70.5	42.8	20.6	88.0	23.0	68.8	44.0	83.6	86.5	18.0	32.7
Medium City	50.6	58.4	66.6	44.5	18.8	82.0	22.6	63.6	38.6	80.3	84.2	16.1	31.3
Smaller Place	53.2	59.7	71.2	45.4	17.0	84.5	25.3	67.4	45.5	82.2	85.9	19.2	35.6
CAREER GUIDANCE OR EDUCATION													
Yes	44.7	49.1	57.8	37.3	17.5	69.6	23.8	55.1	35.6	72.4	73.0	15.3	30.0
No	51.2	58.1	66.6	45.8	17.7	82.6	24.8	63.7	41.0	79.9	82.5	18.1	34.0
COUNSELOR DISCUSSIONS													
Yes	49.9	54.6	67.9	44.8	18.7	78.9	26.3	62.0	38.3	76.2	80.8	17.4	31.5
No	51.0	58.6	64.9	44.3	18.2	82.2	23.6	63.2	42.0	80.1	83.0	17.2	34.3
Don't Remember	40.5	42.6	52.9	36.7	10.9	64.5	24.6	50.3	28.2	65.0	61.4	18.9	30.5
PLANNING VOC-TECH SCHOOL													
Yes	41.6	46.1	53.1	39.3	16.4	65.6	26.1	49.6	28.6	65.4	65.5	11.6	31.6
No	52.2	59.9	67.7	45.5	19.3	84.1	24.2	66.1	44.0	81.7	83.6	17.6	32.3
Undecided	49.3	54.2	64.0	43.0	16.0	78.5	24.8	60.3	37.4	77.7	81.3	19.1	35.2
JOB DECISION													
Yes	49.3	56.0	63.5	45.8	17.1	77.7	24.0	60.1	39.2	77.5	79.0	17.1	34.2
No	50.5	56.1	66.4	40.4	18.7	83.0	25.1	64.3	40.5	79.4	82.3	18.3	31.1

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.24 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 224 -- SATISFACTION FROM WORK
(IN PERCENT)

		QUESTION NUMBER (SEE PRECEEDING FIGURE)				
DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	66	67	68	69	70
CONNECTICUT	34.7	37.4	47.6	32.3	27.4	28.6
SEX						
Female	35.0	36.4	49.4	30.3	27.9	31.0
Male	34.3	38.3	45.8	34.7	27.0	25.8
SIZE OF COMMUNITY						
Big City	32.7	34.3	42.1	28.5	29.5	29.2
Fringe City	37.6	42.5	49.1	37.7	29.8	30.2
Medium City	33.5	35.8	47.6	31.9	26.3	26.0
Smaller Place	34.5	36.7	50.2	30.5	25.8	29.1
CAREER GUIDANCE OR EDUCATION						
Yes	32.3	33.8	46.2	28.5	28.8	24.5
No	35.6	38.8	48.3	33.9	26.9	30.2
COUNSELOR DISCUSSIONS						
Yes	35.7	38.7	50.1	32.4	27.8	29
No	33.2	35.2	45.1	23.5	26.0	26.2
Don't Remember	30.4	34.7	34.4	26.0	30.2	26.8
WORK EXPERIENCE						
Regular Job	36.5	39.5	51.5	33.9	26.6	31.2
Summer Job	33.8	37.7	46.1	32.4	27.5	25.4
Not Worked	32.6	33.9	41.1	27.6	30.4	23.4
Work Study	31.2	27.8	41.1	33.1	29.9	24.2
JOB OCC... ON						
Yes	34.1	35.8	48.2	30.5	28.0	27.8
No	35.8	40.0	46.7	31.8	26.5	29.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6 1.36

DEVIATION FROM AVERAGE PERFORMANCE SCORES

BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 224   SATISFACTION FROM WORK
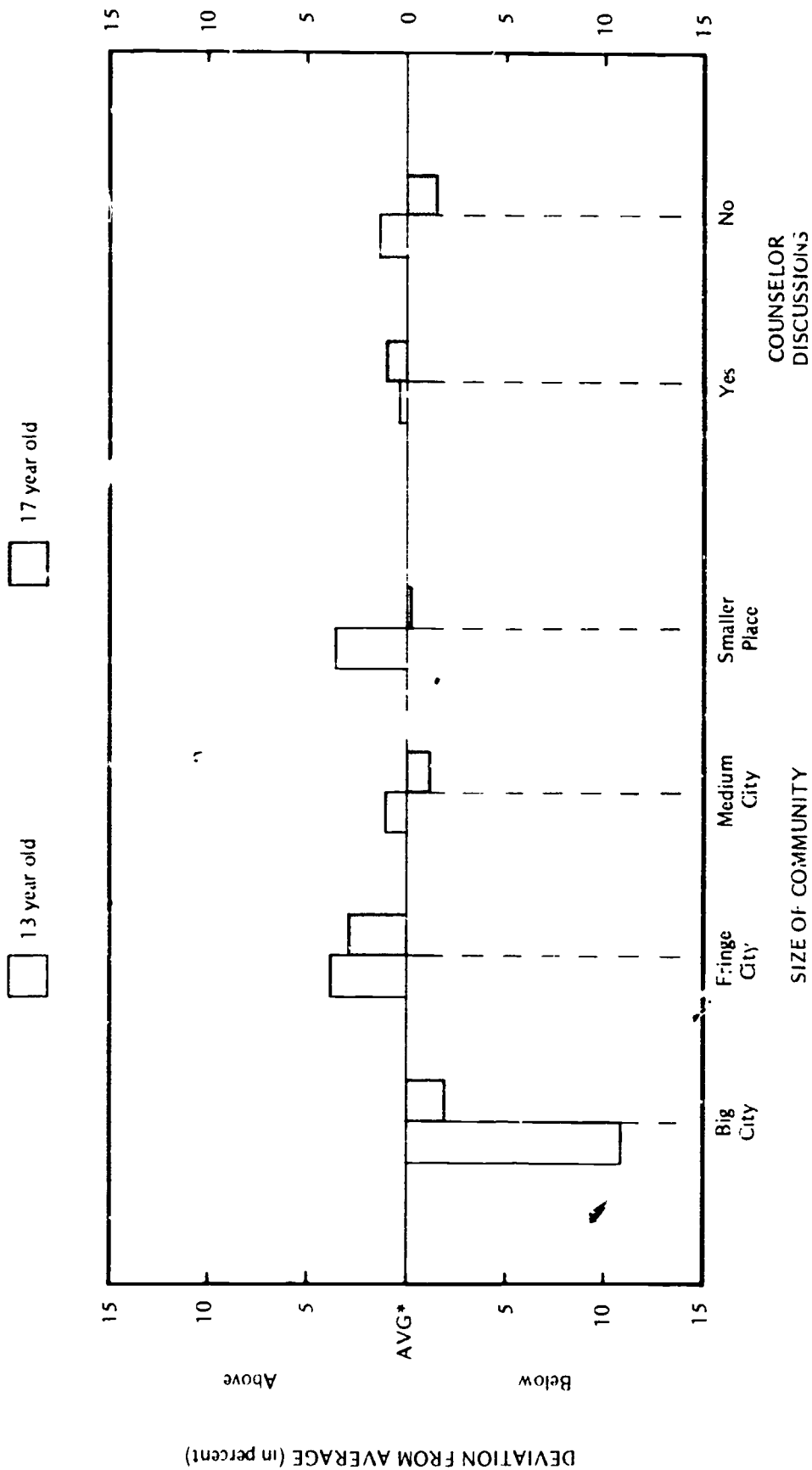
*AVERAGE SCORES: 13 yr. olds — 49.6%;   17 yr. olds - 34.7%

CONTENT DOMAIN 14 SATISFACTION FROM WORK

Overall Content Domain

Overall performance for this content domain was on the low side of the medium range, since the students averaged only 42.1% correct answers. This is the last of the three domains in which the 13 year olds outperformed the 17 year olds. The 13 year olds averaged 49.6%, while the 17 year olds averaged only 34.7%. Except for a minor difference in one question, all five of the 17 year old questions appeared on the 13 year old test. On those questions, seventeens scored 8.4% higher than the average for thirteens. The other seven questions on the 13 year old instrument were relatively easy (average score 68.9%) and account for the overall higher scores for 13 year olds. The 13 year olds found 4 of their 12 questions difficult, while the 17 year olds found 3 of their 5 questions difficult. Overall, it can be concluded that the students do not understand well the kinds of satisfactions different people can derive from their work.

Demographic Variations

The demographic variations are of most interest for the hard questions, which will be discussed below. For the 17 year olds on question 63, it is surprising that boys did much better than girls (34.7% correct compared with 20.3%), since it is usual for girls to do better than boys on about items in this instrument. In this case it is probable that more boys than girls appreciate the amount of authority a ship's captain has, and this in turn may be because boys find it more natural to identify with the traditional male role of a ship's captain.

Individual Questions

The hard questions will be discussed below. Of the remaining ones, a few are worth comment. For the 13 year olds, question 61 asks which occupation is most likely to give a person a sense of belonging. The largest group (43.5%) selected "soldier", which was the correct answer, but almost as many (31.1%) selected "radio announcer", which seems like a fairly solitary job, with little feedback from the persons dealt with. Perhaps these young people experience a close relationship with their favorite radio personalities and imagine that it is reciprocated. For question 66, 39.4% correctly identified "clerk" as an occupation "which would allow a person to be free from the care and worry involved in supervising others", but another 24.6% selected "airline pilot." The latter group may suppose that the pilot just handles the controls, while he is actually in command in the same sense that a ship's captain is in command of his ship. Of course, an ocean voyage can take months, while an airline trip is usually a matter of a few hours, and few airline pilots have to perform marriages or settle disputes. (The same question was asked for 17 year olds as question 67, with very similar results.)

Exceptionally Hard or Easy Questions

For 13 year olds, question 62 on "responsibility for controlling
and directing others" was hard. The correct answer (ship's captain)
was selected by only 17.7%, while 52.9% selected "policeman".
Girls did even worse than boys (13.4% correct compared with 22.1%).
The students probably misunderstand the nature of the policeman's
work. Question 64 (for 13 year olds) and question 66 (for 17 year
olds) were similar, and the results were similar. The majority of
students thought a laboratory technician would have a higher income
than a civil engineer. These students need to learn more about
these two important classes of jobs, the one dealing with skilled
work and the other dealing with professional knowledge and judgment.

Question 69 for both ages was the same, and dealt with regular
(steady) income. Although the 17 year olds did a little better
than the 13 year olds, neither group appreciated that the civil
service is noted for providing regular income. The largest groups
for both ages selected "large manufacturing corporation". This may
reflect a misunderstanding of the concept of regular income, or it
may reflect a pro-business attitude. Question 70 for both ages
was the same, and dealt with "independence on the job." The correct
answer was "teacher", but more students at each age level selected
"farm work". This probably reflects their lack of knowledge of what
a farm worker (as opposed to a farm owner) does, and may reflect
romantic feelings about the outdoor life.

Below is a comparison of the scores of 13 and 17 year olds for the
four questions completely common to both instruments.

Test Item Number		Percent Correct Answers	
13 yr. old	17 yr. old	13 yr. old	17 yr. old
64	66	24.5	37.4
66	67	39.4	47.6
69	69	17.5	27.4
70	70	33.2	28.6
Average of the four questions =		28.6	35.3

13 Year Olds

31. TRAINING PROGRAMS FOR OCCUPATIONS

What education or training is generally expected or required for each of these occupations? Mark one choice for each occupation as shown in the example.

OCCUPATION	General High School or Less	Vocational-Technical School	Apprentice-ship	Post Secondary Schooling	Four Years or More of College
EXAMPLE:					
Practical Nurse	———	X ———	———	———	———
71. Waitress - Waiter	①70.7	2 5.3	3 10.9	4 6.1	5 2.1
72. Glass Blower	1 16.1	②23.1	3 40.1	4 9.7	5 5.4
73. Hospital Attendant	①11.0	2 26.3	3 10.6	4 20.0	5 26.6
74. Social Worker	1 16.4	2 15.4	3 10.6	4 23.5	⑤28.0
75. Air Conditioning & Refrigeration Mechanic	1 8.1	2 39.0	③13.6	4 16.5	5 16.8
76. B'acksmith	1 19.2	②17.2	3 44.7	4 7.9	5 4.4
77. Pharmacist	1 5.4	2 13.4	3 8.6	4 12.7	⑤53.0
78. Occupational Therapy Technician	1 3.5	2 21.0	3 5.2	④15.9	5 47.7
79. Automobile Salesman	①36.8	2 16.2	3 14.8	4 20.3	5 5.8
80. Engineer	1 4.2	2 23.9	3 6.4	4 12.7	⑤47.4

17 Year Olds

311 TRAINING PROGRAMS FOR OCCUPATIONS

What ducation or training is generally expected or required for each of these occupations? Mark one
choice for each occupation as shown in the example.

OCCUPATION	General High School or Less	Vocational-Technical School	Apprenticeship	Post Secondary Schooling	Four Years or More of College
EXAMPLE:					
Practical Nurse	—	X	—	—	—
71. Waitress - Waiter	①90.6	2 1.5	3 4.3	4 1.6	5 0.3
72. Glass Blower	1 15.7	②21.6	3 56.0	4 3.4	5 1.0
73. Hospital Attendant	①24.4	32.4	3 10.5	4 22.0	5 7.9
74. Social Worker	1 7.0	2 7.2	3 3.8	4 27.4	⑤51.8
75. Air Conditioning & Refrigeration Mechanic	1 2.8	2 52.5	③24.3	4 11.7	5 6.9
76. Blacksmith	1 13.6	②14.2	3 63.3	4 3.3	5 2.8
77. Pharmacist	1 1.2	2 5.2	3 2.5	4 9.4	⑤79.7
78. Occupational Therapy Technician	1 1.0	2 15.0	3 18	④22.5	5 56.8
79. Automobile Salesman	①49.6	2 11.4	3 16.6	4 16.6	5 3.2
80. Engineer	1 1.7	2 15.2	3 4.8	4 12.2	⑤65.0

TABLE 6.3.25 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTE T DOMAIN 311 -- TRAINING PROGRAMS
(IN PERCENT)

QUESTION NUMBER (SEE PRECEEDING FIGURE)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	71	72	73	74	75	76	77	78	79	80
CONNECTICUT	31.7	70.7	23.1	11.0	28.0	13.6	17.3	53.0	15.9	36.8	47.4
SEX											
Female	31.7	72.2	22.4	11.8	30.1	12.8	16.3	50.9	15.6	37.3	47.4
Male	31.8	69.3	24.0	10.3	25.9	14.5	18.4	55.4	16.2	36.2	47.5
SIZE OF COMMUNITY											
Big City	27.5	55.3	21.7	14.9	26.9	12.3	18.5	35.5	15.0	34.9	40.3
Fringe City	33.2	74.3	23.9	9.8	32.4	14.3	15.1	60.7	17.5	35.6	48.2
Medium City	32.5	71.4	25.9	10.8	28.2	13.3	17.2	55.0	15.7	39.7	47.4
Smaller Place	32.8	78.2	21.0	9.5	25.1	14.3	18.2	57.6	15.5	36.8	51.9
CAREER GUIDANCE OR EDUCATION											
Yes	30.5	65.7	25.4	11.2	26.0	13.8	18.6	49.3	16.0	34.2	45.0
No	32.3	72.9	22.5	11.2	28.6	13.7	17.1	54.4	16.0	38.0	48.4
COUNSELOR DISCUSSIONS											
Yes	31.7	68.8	22.3	10.1	29.9	13.2	16.3	55.3	15.5	39.2	46.3
No	32.6	74.3	23.8	11.6	27.5	13.2	17.6	54.9	15.2	37.7	49.1
Don't Remember	27.4	57.5	20.9	12.0	27.0	17.4	19.8	36.8	15.5	26.6	40.1
PLANNING VOC-TECH SCHOOL											
Yes	30.4	64.6	28.4	10.2	24.5	16.6	19.6	43.0	16.5	37.8	42.6
No	33.1	73.5	24.1	12.0	29.3	12.9	19.2	58.4	15.3	38.1	40.6
Undecided	30.4	70.5	19.8	10.2	27.3	13.5	14.2	49.3	16.6	34.8	47.8
JOB DECISION											
Yes	31.9	70.4	23.5	10.7	29.6	13.4	18.1	53.3	15.3	37.7	47.3
No	31.7	72.8	22.3	13.1	25.6	13.8	16.4	53.4	16.8	36.0	47.8

NOTE. For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.26 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 311 -- TRAINING PROGRAMS
(IN PERCENT)

QUESTION NUMBER (SEE PRECEEDING FIGURE)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	71	72	73	74	75	76	77	78	79	80
CONNECTICUT	44.4	90.6	21.6	24.4	51.8	24.3	14.2	79.7	22.5	49.6	65.0
SEX											
Female	44.8	92.4	19.7	24.8	58.6	25.6	12.3	80.1	23.1	49.1	62.8
Male	43.9	88.8	23.6	24.0	44.5	22.8	16.3	79.2	22.0	50.1	67.7
SIZE OF COMMUNITY											
Big City	41.8	85.2	25.4	25.4	50.5	20.6	12.1	73.6	16.8	44.7	61.4
Fringe City	46.6	95.0	23.0	22.1	56.7	25.1	15.8	82.1	23.2	53.4	69.4
Medium City	44.0	90.2	17.9	27.3	49.7	24.0	11.7	80.7	23.2	52.4	63.3
Smaller Place	44.5	90.9	21.1	23.0	50.2	26.5	16.6	81.0	23.9	47.1	65.1
CAREER GUIDANCE OR EDUCATION											
Yes	43.4	89.3	20.2	23.9	47.3	25.8	14.2	79.5	21.0	50.4	62.6
No	44.8	91.4	22.2	24.6	53.9	23.5	14.3	80.0	23.1	49.3	66.2
COUNSELOR DISCUSSIONS											
Yes	45.4	92.4	21.1	24.3	55.2	25.7	13.5	82.2	23.7	48.3	67.4
No	43.4	88.4	22.8	25.1	48.1	22.1	15.1	77.8	20.4	52.8	61.7
Don't Remember	38.9	83.5	21.3	21.8	34.6	18.8	18.1	63.9	20.3	49.3	57.9
WORK EXPERIENCE											
Regular Job	45.8	92.8	20.9	25.1	53.6	26.2	14.4	82.8	24.4	51.5	66.6
Summer Job	43.6	80.3	21.2	24.2	50.2	22.7	13.4	77.3	22.5	48.5	66.6
Not Worked	42.5	87.8	21.7	22.1	52.4	22.0	15.3	77.2	17.4	45.1	63.7
Work Study	45.1	95.8	28.2	28.6	52.6	26.2	18.1	78.4	21.2	51.7	50.4
JOB DECISION											
Yes	44.5	90.9	20.6	23.3	53.5	25.2	15.1	81.1	21.4	48.6	65.6
No	44.3	90.7	23.3	26.5	49.2	22.6	12.8	77.4	24.7	51.7	64.5

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.39

DEVIATION FROM AVERAGE PERFORMANCE SCORES
BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 311 — TRAINING PROGRAMS
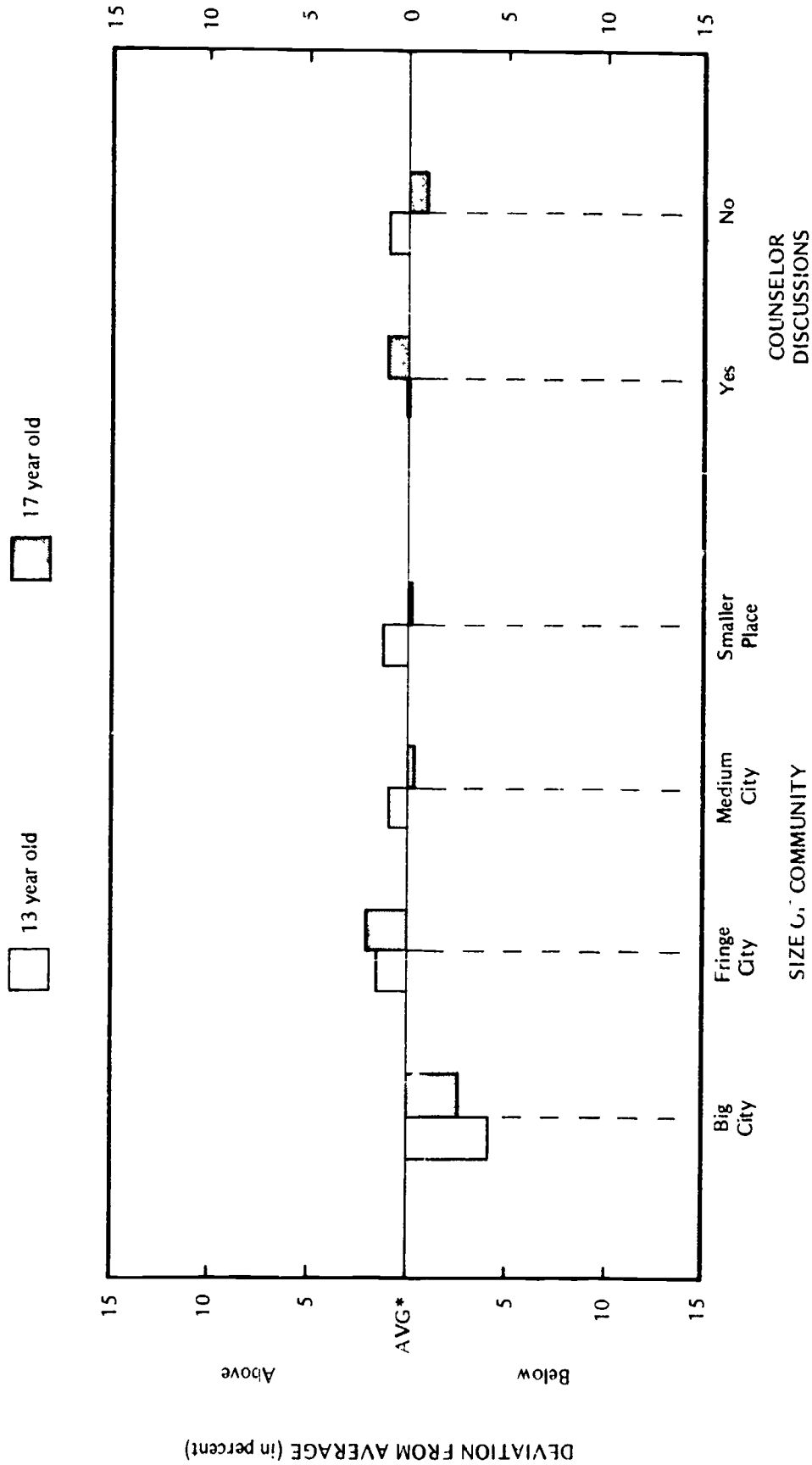
*AVERAGE SCORES: 13 yr. olds — 31.7%;   17 yr. olds — 44.4%

CONTENT DOMAIN 311 TRAINING PROGRAMS

Overall Content Domain

Overall performance for this content domain was poor, since the students averaged only 36.0% correct answers. The 17 year olds did better than the 13 year olds (44.4% correct compared with 31.7%). The spread in the proportion of correct answers by question was large for both age groups, indicating that their knowledge of the training needed for various occupations varied from quite poor to quite good.

Demographic Variations

The demographic variations for the content domain are similar to those of the other domains. There are interesting demographic findings for specific questions which are discussed below.

Individual Questions

All ten questions were the same for both age groups. Question 77 (pharmacist) was not a hard question for 13 year olds, since 53.0% gave the correct answer. But both Big City students (only 35.5% correct) and students who were planning to go to a voc-tech school (only 43.0%) did badly. Question 74 (social worker) was not a hard question for 17 year olds, since 51.8% gave the correct answer. Here the female students did unusually well, since 58.6% of them gave the correct answer. It is likely that the female students know more about social work, or can better identify with people who do that kind of work.

Question by question, the data show that students at both ages are much more aware of the requirements for those jobs requiring college graduation or less than high-school education, than they are aware of those jobs for which the requirements can be filled by high-school or voc-tech school graduation, or apprenticeship, or some kind of post-secondary schooling. It is more than likely that this pattern reflects out-of-school learning as a result of living experiences. In general this domain illustrates the need for earlier, and better, career education.

Exceptionally Hard or Easy Questions

The same five questions were hard for both age groups. Question 72 (glass blower) received more incorrect answers (for apprenticeship) than correct answers (for voc-tech school). Clearly most students know little about glass blowing, but 13 year olds who planned to go to voc-tech school did better on this question than any other group (28.4% correct). Question 73 (hospital attendant) received a wide range of answers, and a low proportion of correct answers (11.0% for 13 year olds and 24.4% for 17 year olds). Yet Big City

students at both age levels did better than many other groups (14.9%
correct for 13 year olds and 25.4% for 17 year olds). It is possible
that the job of a hospital attendant is within the personal experience
of many of the Big City children, and their answers may reflect
knowledge gained from experience rather than from secondary sources.
Question 75 (air conditioning and refrigeration mechanic) received
a low proportion of correct answers (apprenticeship). More students
at each age level selected voc-tech school. The interesting demo-
graphic finding here is that 13 year old students who planned to
go to voc-tech school did well on this question (16.6% correct)
compared with other students. Question 76 (blacksmith) was hard,
also. Many more students at each age level chose the incorrect
answer "apprenticeship" than the correct answer "voc-tech school".
This was one of the few questions for which fewer girls than boys
gave the correct answer. Question 78 (occupational therapy
technician) was also hard. At both age levels more people selected
the wrong answer "four years or more of college" than the correct
answer "post secondary schooling". This is another case of the
students not understanding the difference between a technician's
job and that of a professional.

13 Year Olds

312 ACTIVITIES RELATED TO CAREERS

IN EACH OF THE ITEMS BELOW, PLACE AN "X" IN THE SPACE IN FRONT OF THE
ONE STATEMENT YOU THINK IS THE MOST APPROPRIATE.

Eric and Sally are in the 8th grade. They say they want to select
courses and activities that will help them to become commercial airline
pilots (highly skilled).

81. Mark the most appropriate type of training that will help them
     reach this occupational level.

     1 _19.0_ On the Job Training

     2 _25.2_ Four Year College Training

     ③ _29.3_ Private Training Program

     4 _20.6_ Armed Forces Training Program

82. Mark the most appropriate school level emphasis to reach this
     occupational level.

     1 _5.4_ Fine Arts

     ② _48.0_ Math/Science

     3 _33.1_ Communication Skills

     4 _7.6_ Practical Arts

83. Mark the most appropriate school activity to reach this occupational
     level.

     ① _20.9_ Explore this field in a career planning group

     2 _19.3_ Go on field trips to local aircraft plant

     3 _29.3_ Discuss job opportunities with pilots

     4 _24.3_ Join an aviators club

84. Mark the most appropriate community activity that they can do to
     reach this occupational level.

     ` _8.8_ Join a model airplane club

     2 _65.0_ Do part-time work at an airport

     3 _12.4_ Do volunteer work at a travel agency

     4 _7.7_ Enroll in Red Cross First Aid course

312   ACTIVITIES RELATED CAREERS   (CONTINUED)

Debbie and John, eighth grade students, are planning to become police officers.

85.   Mark the most appropriate type of training that will help them enter this occupation.

①_52.1_ On the job training

2_18.8_ Apprenticeship training

3_20.5_ Four years of college

4_22.3_ State Technical College

86.   Mark their most appropriate high school course of study emphasis.

①_31.2_ Social Science Courses

2_39.7_ Physical Education

3_10.9_ Practical Arts Courses

4_11.2_ Math/Science Courses

87.   Mark the most appropriate community activity for them to participate in.

①_21.2_ Volunteer work or club work in the community

2__8.5_ Join an athletic team

3_33.5_ Study about police work on their own

4_29.4_ Interview police officers

312 ACTIVITIES RELATED TO CAREERS

Mike told his school counselor he wants to become a heavy equipment operator. Mike and the counselor began to plan activities that will help Mike to gain employment.

In each item, mark with an "X" the strategy you think MOST APPROPRIATE for Mike.

81. Most appropriate type of training after high school

1 **67.1** On the Job Training

2 **3.6** Community College

3 **13.1** State Technical College

④ **14.1** Apprenticeship

82. Most appropriate school activity

1 **9.2** Course in Career Planning

② **78.3** High School Work Experience Program

3 **5.9** Field Trips

4 **4.0** Personal Counseling

83. Most appropriate community activity

1 **9.0** Volunteer Work

2 **59.5** Part-time work with Municipal Engineer

③ **24.3** Job site visitations

4 **4.7** Attend community planning meetings

Sue has chosen a career in law enforcement. She plans to enter as a police officer. In each item, mark with an "X" the strategy you think MOST APPROPRIATE for Sue.

84. Most appropriate type of training after High School

① **20.5** On the Job Training

2 **29.8** Apprenticeship Training

3 **30.5** Four years of college

4 **16.3** State Technical College

312   ACTIVITIES RELATED TO CAREERS   (CONTINUED)

85.   Most appropriate high school courses

(1) 64.1 Social Science courses

2 18.2 Physical Education

3 7.5 Practical Arts

4 7.4 Math and Science

86.   Most appropriate School activity

1 53.0 Participate in student government

2 9.6 Career Search

3 4.8 Viewing films

(4) 29.8 High School Service Club Work

87.   Most appropriate Community activity

1 6.6 Interview Police Officers

(2) 78.7 Part-time or Volunteer work at Police Department

3 6.0 YWCA Club work

4 5.9 Attend Municipal Court sessions

TABLE 6.3.27 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 312 -- RELATED ACTIVITIES
(IN PERCENT)

QUESTION NUMBER (SEE PRECEEDING FIGURE)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	81	82	83	84	85	86	87
CONNECTICUT	27.4	29.3	48.0	20.9	8.8	32.1	31.3	21.2
SEX								
Female	28.2	29.2	51.4	20.9	9.4	32.0	32.3	22.3
Male	26.5	29.7	44.5	20.9	8.2	32.4	30.0	20.1
SIZE OF COMMUNITY								
Big City	23.2	21.9	36.2	19.9	14.9	24.8	27.2	17.4
Fringe City	29.9	36.4	51.0	23.9	6.6	33.4	33.0	25.2
Medium City	27.5	27.9	51.1	20.0	7.6	34.8	32.0	19.1
Smaller Place	28.2	30.0	51.3	20.0	7.3	34.0	32.1	22.5
CAREER GUIDANCE OR EDUCATION								
Yes	25.5	29.4	45.3	18.9	9.3	26.4	29.1	19.8
No	28.2	29.8	49.4	21.6	8.5	34.1	32.3	21.4
COUNSELOR DISCUSSIONS								
Yes	26.4	27.7	47.8	19.2	10.0	25.9	28.5	21.9
No	28.5	30.4	49.7	21.9	8.6	33.5	33.7	21.4
Don't Remember	24.1	30.0	39.8	20.8	7.2	29.6	25.3	16.0
PLANNING VOC-TECH SCHOOL								
Yes	24.6	23.9	44.6	20.5	9.8	28.0	25.7	20.1
No	29.1	31.9	52.3	20.3	8.6	34.6	33.4	22.6
Undecided	26.4	29.2	44.1	22.8	8.8	30.5	30.8	18.9
JOB DECISION								
Yes	27.5	29.2	49.1	20.3	9.2	32.4	30.9	21.5
No	27.3	30.4	46.9	21.9	8.0	31.4	32.3	20.1

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.28 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 312 -- RELATED ACTIVITIES
(IN PERCENT)

QUESTION NUMBER (SEE PRECEEDING FIGURE)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	81	82	83	84	85	86	87
CONNECTICUT	44.3	14.1	78.3	24.3	20.5	64.1	29.8	78.7
SEX								
Female	44.9	14.2	80.8	22.2	19.4	66.4	29.2	82.0
Male	43.7	14.0	75.8	26.5	21.6	62.0	30.5	75.6
SIZE OF COMMUNITY								
Big City	38.6	13.2	68.3	23.0	21.3	48.1	28.3	67.7
Fringe City	47.6	14.6	83.8	20.4	24.0	73.7	33.7	82.8
Medium City	44.7	12.9	80.4	23.9	20.8	64.5	29.1	81.4
Smaller Place	44.9	15.5	78.4	29.0	16.6	66.5	27.9	80.4
CAREER GUIDANCE OR EDUCATION								
Yes	43.1	15.1	78.3	20.7	19.0	63.3	26.6	79.0
No	44.8	13.8	76.5	25.7	21.2	64.6	31.1	79.0
COUNSELOR DISCUSSIONS								
Yes	45.9	15.4	81.8	23.5	18.6	69.5	29.3	82.5
No	42.4	11.6	74.1	25.4	24.3	56.6	31.1	73.4
Don't Remember	36.7	12.8	63.1	27.0	22.2	43.6	23.2	65.2
WORK EXPERIENCE								
Regular Job	45.5	15.9	81.7	25.2	18.4	67.2	29.8	80.6
Summer Job	43.4	12.2	75.9	25.0	21.4	61.3	30.6	77.4
Not Worked	43.5	15.0	76.6	21.1	22.0	63.4	29.1	77.5
Work Study	43.7	11.6	74.6	15.7	24.0	68.9	30.1	81.1
JOB DECISION								
Yes	44.5	14.5	80.3	22.6	20.5	64.1	29.5	79.7
No	44.1	13.5	75.0	27.2	20.3	65.0	30.1	77.5

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.42

DEVIATION FROM AVERAGE PERFORMANCE SCORES

BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS
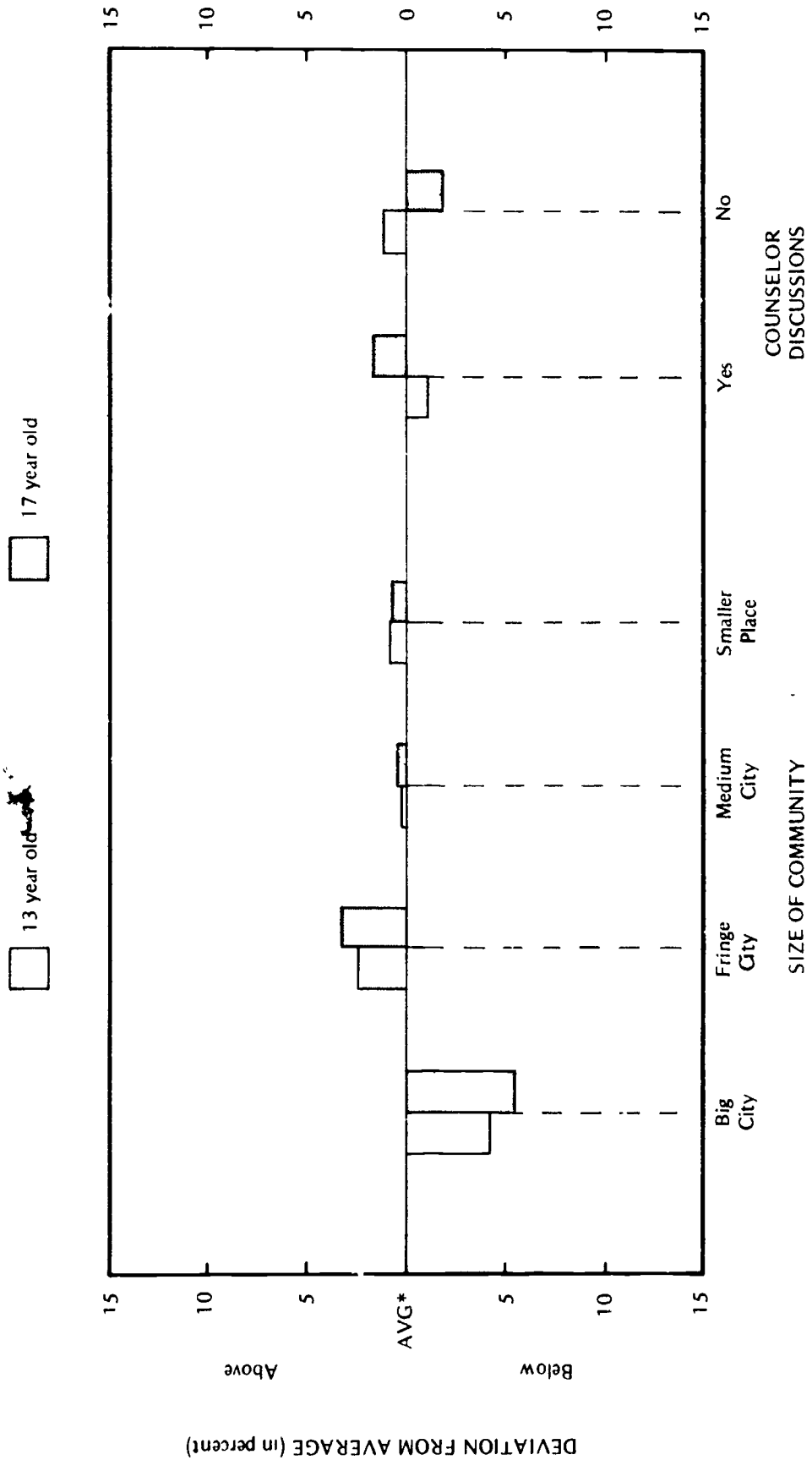
CONTENT DOMAIN 312 - RELATED ACTIVITIES

*AVERAGE SCORES: 13 yr. olds — 27.4%;   17 yr. olds — 44.2%

CONTENT DOMAIN 312   RELATED ACTIVITIES

Overall Content Domain

Overall performance for this content domain was on the low side of the medium range, since the students averaged only 35.8% correct answers. The 17 year olds averaged 44.2%, while the 13 year olds averaged only 27.4%. Both age groups found four of the seven questions hard. Overall, it can be concluded that the students do not understand well the kinds of activities that can assist a person in fulfilling his career objectives.

Demographic Variations

The overall pattern of demographic variations for this content domain is similar to that of most of the other domains.

Individual Questions

The hard questions will be discussed below. Questions 81, 82 and 85 for 13 year olds do not qualify as hard questions, since more students selected the correct answer than any of the wrong answers. Yet so many people selected wrong answers that we must conclude that these students do not understand the subject matter the questions cover very well. There are no demographic comparisons which shed light on this poor performance. The 17 year olds did quite well for the three questions which do not qualify as hard (questions 82, 85, and 87).

Exceptionally Hard or Easy Questions

For 13 year olds, questions 83, 86 and 87 were hard. They were hard for all of the demographic groups. Question 84 was even harder, since only 8.8% selected the correct answer and 65.0% selected the most popular wrong answer. It is curious that the Big City students did much better than the others on this question - 14.9% correct. We might suggest that the correct answer (join a model airplane club) is much more concrete than the other answers, and is easier to relate to becoming a pilot.

For 17 year olds, questions 81 and 86 were hard, and the demographic
analysis does not supply any clues as to why. Question 83 was hard,
and there were some curious demographic patterns in the results. The
girls did worse than the boys (22.2% and 26.5%, respectively) in
contrast to the pattern of most other items. The Fringe City students
did worse than any other city size group (20.4%) in contrast to the
established pattern, also. Question 84 has some similarities to
question 83. The girls did worse than the boys (19.4% and 21.6%,
respectively). Students from smaller places did badly (16.6%), as
did those with regular jobs (18.4%). Those who had not had counselor
discussions did much better (24.3%) than other students. This suggests
that the more you know, the less likely you are to answer this
question correctly. Question 84 deals with appropriate training for
a career in law enforcement. "On the job training" is the correct
answer. There has been much lay publicity in recent years about the
need for more professionals in police work and the value of a college
or even a legal education for law enforcement work. It is well known
that many FBI agents are college graduates. Perhaps many students are
responding to this publicity, which was intended to improve the public
image of the policeman, as if it accurately represented the current
state of affairs.

It seems likely that in all hard questions, where students who normally
perform lower than average, appear to be brighter, that the rationale
expressed in Content Domain 119 is valid i.e., the pattern here is
really normal, in that the normally lower performing students are not
selecting as the "right" answers, the ones picked by their brighter peers.

321 RELATIONSHIPS AMONG OCCUPATIONAL LEVEL, MEASURED VERBAL ABILITY,
     MATH ABILITY, AND INTERESTS

For each occupation listed below there is one job fact that is wrong.
Find it and mark it with an "X", as shown in the example.

OCCUPATION	Occupational level	Verbal Ability	Math Ability	Interests
EXAMPLE:				
Mailman	___unskilled	___low	___low	X ideas things
88. Farmhand	①35.3 skilled	2 18.4 low	3 17.7 low	4 19.9 things outdoors
89. Television Announcer	①31.9 semi-skilled	2 16.7 high average	3 24.8 average	4 17.5 people data
90. Chemical Lab Technician	①38.9 semi-skilled	2 11.6 average	3 18.1 high average	4 22.5 things
91. Speech Teacher	1 17.0 profes-sional	②44.1 average	3 20.1 high average	4 10.1 people ideas
92. Registered Nurse	①20.1 skilled	2 26.8 high average	3 29.4 average	4 15.0 people data

321 RELATIONSHIPS AMONG OCCUPATIONAL LEVEL, MEASURED VERBAL ABILITY,
     MATH ABILITY, AND INTERESTS

For each occupation listed below there is <u>one job fact that is wrong.</u>
Find it and mark it with an "X", as shown in the example.

OCCUPATION	Occupational level	Verbal Ability	Math Ability	Interests
EXAMPLE:				
Mailman	___unskilled	___low	___low	X ideas / things
88. Farmhand	(1) 52.1 skilled	2 13.6 low	3 19.9 low	4 10.5 things / outdoors
89. Television Announcer	(1) 45.1 semi-skilled	2 10.0 high average	3 28.8 average	4 11.7 people / data
90. Chemical Lab Technician	(1) 56.6 semi-skilled	2 9.4 average	3 10.6 high average	4 19.7 things
91. Speech Teacher	1 93 profes-sional	(2) 59.4 average	3 21.7 high average	4 6.0 people / ideas
92. Registered Nurse	(1) 18.4 skilled	2 26.2 high average	3 40.4 average	4 10.9 people / data

TABLE 6.3.29 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 321 -- LEVEL/ABILITIES/INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		88	89	90	91	92
CONNECTICUT	34.0	35.3	32.0	38.9	44.1	20.1
SEX						
Female	33.5	32.4	32.3	39.8	42.6	19.4
Male	34.7	38.4	31.6	38.1	44.6	20.8
SIZE OF COMMUNITY						
Big City	26.1	27.3	24.4	24.7	29.0	25.3
Fringe City	38.1	40.3	34.5	46.0	50.9	18.9
Medium City	34.0	33.2	32.3	41.6	45.9	17.2
Smaller Place	36.4	38.6	35.0	40.8	47.7	19.8
CAREER GUIDANCE OR EDUCATION						
Yes	31.3	32.7	31.3	32.6	36.5	23.6
No	35.3	36.6	32.4	41.2	46.7	19.5
COUNSELOR DISCUSSIONS						
Yes	35.2	36.7	32.1	41.3	46.1	19.7
No	35.0	36.3	33.0	40.7	45.0	20.0
Don't Remember	27.3	27.7	26.3	22.5	34.6	25.5
PLANNING VOC-TECH SCHOOL						
Yes	30.3	30.2	25.8	37.3	36.6	21.6
No	36.3	39.3	34.5	40.7	48.4	18.4
Undecided	33.1	32.3	31.6	37.7	41.2	22.7
JOB DECISION						
Yes	33.7	34.7	31.1	38.0	44.4	20.4
No	35.3	37.2	33.8	41.0	44.1	20.4

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE 6.3.30 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 321 -- LEVEL/ABILITIES/INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE PRECEEDING FIGURE)				
		88	89	90	91	92
CONNECTICUT	46.3	52.2	45.1	56.6	59.3	18.4
SEX						
Female	46.2	49.9	46.3	58.3	58.9	17.7
Male	46.6	54.7	44.1	55.1	60.0	19.1
SIZE OF COMMUNITY						
Big City	38.3	40.8	42.1	45.4	44.2	19.0
Fringe City	49.3	52.3	49.1	61.5	66.5	17.0
Medium City	47.4	56.3	44.8	57.1	59.9	19.0
Smaller Place	48.3	56.2	44.0	59.7	63.1	18.7
CAREER GUIDANCE OR EDUCATION						
Yes	43.7	47.4	45.2	49.9	55.3	20.5
No	47.5	54.0	45.2	59.5	61.1	17.7
COUNSELOR DISCUSSIONS						
Yes	47.9	55.0	47.2	58.5	61.1	17.?
No	45.4	49.2	43.5	55.4	58.1	20.7
Don't Remember	35.9	37.5	32.8	44.7	48.2	16.2
WORK EXPERIENCE						
Regular Job	48.4	54.3	46.4	60.5	62.7	17.8
Summer Job	45.6	53.6	44.7	53.7	57.5	18.4
Not Worked	43.8	47.0	43.4	53.6	57.6	17.6
Work Study	44.0	39.1	49.1	54.8	54.4	22.6
JOB DECISION						
Yes	46.5	51.4	47.4	56.9	55.0	17.7
No	46.2	53.5	41.2	56.5	60.0	19.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

FIGURE 6.3.45

DEVIATION FROM AVERAGE PERFORMANCE SCORES

BY SIZE OF COMMUNITY AND COUNSELOR DISCUSSIONS

CONTENT DOMAIN 32: -- LEVEL/ABILITIES/INTERESTS

17 year old

13 year old

COUNSELOR DISCUSSIONS

No

Yes

Smaller Place

Medium City

Fringe City

Big City

SIZE OF COMMUNITY

DEVIATION FROM AVERAGE (in percent)

Above

Below

AVG*
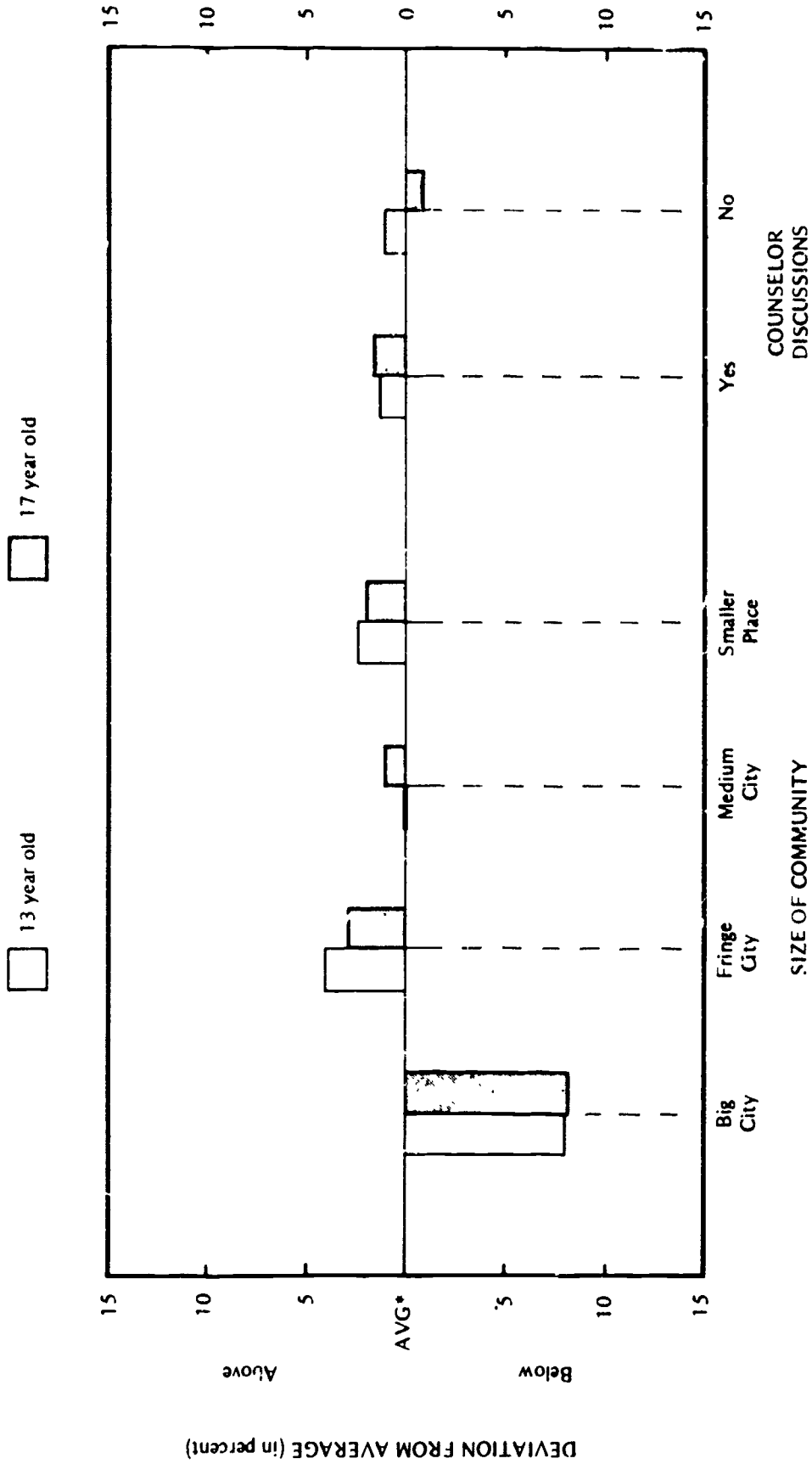
*AVERAGE SCORES: 13 yr. olds — 34.0%;   17 yr. olds — 46.3%

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CONTENT DOMAIN 321 LEVEL/ABILITIES/INTERESTS

Overall Content Domain

Overall performance for this content domain was on the low side of the medium range, since the students averaged only 40.1% correct answers. The questions were the same for both age groups, and the 17 year olds did better than the 13 year olds (46.3% compared with 34.0%). Overall, it can be concluded that the students did only a fair job of relating occupational level, verbal and math ability, and interests.

Demographic Variations

The overall pattern of demographic variations for this content domain is similar to that of most of the other domains.

Individual Questions

The students did a fair job answering questions 88 through 91. Girls did not do as well as boys for question 83 (farmhand) for both age levels, and this is unusual. This is thought of as man's work, and perhaps the boys understand it better. There is nothing unusual in the pattern of answers to question 89 (television announcer) at either age level. For question 90 (chemical lab technician) the only unusual finding was that 13 year olds from Big Cities did very badly (24.7% correct compared to more than 40% for all others). For question 91 (speech teacher) there were parallel findings for each age level - girls did worse than boys and Big City students did worse than usual relative to the others.

Exceptionally Hard or Easy Questions

Question 92 (registered nurse) was hard for both age levels. This was another case where the group of students as a whole did badly (20.1% correct for 13 year olds and 18.4% for 17 year olds), while demographic groups who usually do relatively well did relatively bad. (See the explanation of similar phenomena in Content Domains 119 and 312.) For both ages, the boys did better than the girls. For the 13 year olds, the Big City students did much better than the others (25.3% compared to less than 20%). For the 17 year olds, the Fringe City students did worse than all of the others (17.0% compared with 18.7% or better). These differences are also visible in the other demographics.

APPENDIX A

JOHNSON AND MITCHELL MATERIAL

CONNECTICUT STATE DEPARTMENT OF EDUCATION
Bureau of Pupil Personnel and Special Educational Services

Hartford

Connecticut Guidance Objectives*

Educational Domain

1.0 Perceptualization Objectives

    1.1 Each student develops an awareness of the educational setting.
        The goal is for each student to become knowledgeable about the
        educational setting within which he operates. It has referen-
        ces to the school's physical setting, academic programs, extra-
        curricular activities, and established rules governing student
        conduct. The emphasis is on ability to differentiate courses
        and activities on the basis of their content and required skills.

        1.11 Objective: Each student is aware of the school physical
                           plant.

        1.12 Objective: Each student is aware of the curriculum
                           alternatives or ᵒ him and the educational
                           and vocationaᵗ . ᵗo which they lead.

        1.13 Objective: Each student is aware of the requirements
                           for achievement within his program.

        1.14 Objective: Each student is aware of the abilities needed
                           for effective functioning in each curriculum
                           alternative.

        1.15 Objective: Each student is aware of elective courses
                           and extra-curricular activities that are
                           available to him.

        1.16 Objective: Each student is aware of the differences
                           between available curriculums (types of
                           courses studied, skills needed, and direction
                           each leads).

        1.17 Objective: Each student is aware of expected role
                           behavior in the school setting.

*Adapted from objectives published in CPGA Monograph Service No. I
Accountability in Pupil Personnel Services: A Process Guide for the
Development of Objectives. California Personnel and Guidance Ass'n.
Fullerton, California, 1971.

1.2 Each student develops an awareness of self in the educational
     setting. The goal is for each student to develop an accurate
     perception of himself in his educational environment. The
     emphasis is on self-understanding of abilities, limitations,
     and motivations. As a result of these understandings the
     student can begin to identify with the school in general and
     a curriculum in particular.

     1.21 Objective: Each student is aware of his academic
                        abilities and limitations.

     1.22 Objective: Each student is aware of special talents
                        and becomes aware of the opportunities to
                        to develop them.

     1.23 Objective: Each student is aware of his educational
                        interests.

2.0 Conceptualization Objectives

     2.1 Each student develops an accurate concept of self in the educa-
          tional setting. The goal is for each student to synthesize facts
          and knowledge pertaining to himself and the educational setting
          into a rational and useful order. This conceptualization will
          enable each student to make decisions, formulate plans, and
          acquire value patterns pertaining to education. These decisions,
          plans and value patterns should move the student in a direction
          that is consistent with his interests and abilities and within
          the normative tolerances of his society.

          2.11 Objective: Each student decides on a curriculum that is
                             consistent with his ability and interests
                             and future goals.

          2.12 Objective: Each student decides on electives that are
                             consistent with his ability, aptitudes,
                             interests and tentative future goals.

          2.13 Objective: Each student decides on extra-curricular
                             activities that are consistent with his
                             interests and abilities.

          2.14 Objective: Each student develops an attitude that
                             Optimum school achievement (consistent with
                             his ability) is important.

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2.2 Each student develops an effective approach toward the achievement of educational goals. The goal is for each student to develop adaptive and adjustive behaviors as related to educational goals. These behaviors emphasize harmonious relationships which the student achieves with his environment through skill, judgement, and flexibility. While these behaviors are somewhat complementary they can be differentiated in terms of the techniques used to achieve the harmonious relationship. Adaptive behavior implies manipulation of the environment and adjustive behavior implies the modification of personal behavior patterns to fit the existing conditions. The acquisition of these behaviors will enable the student to meet changing environmental demands and to perform at a level consistent with his ability.

2.21 Objective: Each student is aware of the variety of educational options open to him.

2.22 Objective: Each student is competent in solving educational problems through planning, decision making, implementing decisions, and evaluation.

2.23 Objective: Each student is effective in coping with school assignments.

2.24 Objective: Each student gives responsible attention to developing skills and work habits needed in meeting the requirements of the school.

2.25 Objective: Each student identifies the normative tolerances of the organized school community and adapts his behaviro responsibly, recognizing his own individuality and the needs of the school organization.

3.0 Generalization Objectives

3.1 Each student copes constructively with the educational environment, The goal is for each student to develop aNd to use consistently effective coping behaviors in response to educational demands. This implies a certain degree of conformity to school regulations and a display of effort with respect to academic achievement. It does not, however, mean total submission by each student, but does emphasize acceptable methods for reconciling differences.

3.11 Objective: Each student takes responsibility for himself
                  as a contributing member of the school
                  community.

3.12 Objective: Each student takes responsibility for adhering
                  to school regulations.

3.13 Objective: Each student expresses independent views in
                  an acceptable fashion.

3.2 Each student attains personal satisfaction and a sense of worth
    from educational experiences. The goal is for each student to
    interpret his school involvement as meaningful and satisfying to
    him. This implies involvement that is consistent with his ability
    and interests so success is probable. The probability of success
    promotes perserverance toward chosen goals and brings satisfaction
    from the striving. Thus satisfaction is not solely dependent on
    the attainment of chosen goals, but arises also from the student's
    interpretation that success is probable.

    3.21 Objective: Each student has congruence between his educa-
                      tional level aspirations and his aptitudes,
                      measured ability, and past achievement.

    3.22 Objective: Each student has congruence between his chosen
                      school activities and measured and claimed
                      interests.

    3.23 Objective: Each student recognizes the place of educa-
                      tional achievement in attaining goals.

    3.24 Objective: Each student demonstrates self confidence
                      in his educational goals.

    3.25 Objective: Each student identifies and expresses creati-
                      vity as he is able in the education setting
                      in ways that lead to the satisfaction of
                      having made a contribution.

3.3 Each student works toward and realizes chosen educational plans.
    The goal is for each student to follow through and complete his
    long range educational plans. Implicit in this goal is the
    constant striving toward new educational goals that are consis-
    tent with each student's ability. Thus high school graduation
    is not an end in itself but the mastery of one educational goals

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which lead to new goals.

3.31 Objective: Each student completes his chosen curriculum.

3.32 Objective: Each student pursues learning (after high school) consistent with the student's measured ability, past achievement, and interests.

Career Domain

1.0 Perceptualization Objectives

1.1 Each student develops an awareness of the world of work. The goal is for each student to become conscience of the various life styles pertain to a set of standards and practices (roles if you wish that dominate and regulate the more important behaviors of a person during a considerable period of his life). It also has reference to occupational mobility patterns, stability of the occupation, and rewards. It is essential that each student be able to differentiate occupational levels (un-skilled, semi-skilled, professional) on the basis of the life style associated with each.

1.11 Objective: Each student is aware of the training requirements and needed skills at different occupational levels.

1.12 Objective: Each student is aware of the work roles and social roles expected at different occupational levels.

1.13 Objective: Each student is aware of differences between necessary skills and expected role behaviors at different occupational levels.

1.14 Objective: Each student is aware of the concept of work in our society, the occupational structure, and significant trends.

1.2 Each student develops an accurate career awareness. The goal

is for each student to develop an accurate perception of himself in relation to the "world of work,". The emphasis is upon the students understanding of his abilities, limitations, and motivations. As a result of these understandings the student can begin to identify with an occupational level by perceiving his desired "life style" in relation to that typical of an occupational level.

1.21 Objective: Each student is aware of his particular occupational abilities, interests, and potentialities, and limitations.

1.22 Objective: Each student is aware of his attitudes and emerging values toward the various social roles and work roles required at different occupational levels.

2.0 Conceptualization Objectives

2.1 Each student develops an accurate concept of self in relation to the work world. The goal is for each student to synthesize facts and knowledge pertaining to himself and the work world into a rational and useful order. This conceptualization enables each student to make decisions, formulate plans, and acquire value patterns pertaining to his future occupation. These decisions, plans, and value patterns should move each student in a direction that is consistent with his interest, and abilities and within the normative tolerances of his society.

2.11 Objective: Each student makes a tentative choice of an occupational cluster that is consistent with his interests, aptitudes, and abilities.

2.12 Objective: Each parent formulates occupational expectations for his/her child that are consistent with his abilities, and interests.

2.2 Each student develops an effective work behavior patterns as requisite to the achievement of career goals. The goal is for each student to develop adaptive and adjustive behaviors as related to career goals. These behaviors emphasize harmonious relationships which the student achieves with his

environment through skill, judgement, and flexibility. While these behaviours are somewhat complementary they can be differentiated in terms of the techniques used to achieve the harmonious relationship. Adaptive behaviour implies a manipulation of the environment and adjustive behavior implies the modification of personal behavior behavior patterns to fit the existing conditions. The acquisition of these behaviors will enable each student to meet changing environmental demands related to a career and to perform at a level consistent with his ability.

    2.21 Objective: Each student identifies career alternatives that are consistent with his ability and claimed interests.

    2.22 Objective: Each student is competent in solving career problems through planning, decision making, implementing decisions, and evaluation.

    2.23 Objective: Each student develops an attitude that effort consistent with his ability on work tasks is important.

    2.24 Objective: Each student expresses creativity in work tasks as he is able and gains satisfaction from the experience.

3.0 Generalization Objectives

3.1 Each student effectively implements career choices. The goal is for each student to commit himself to his chosen career. This implies that he conform somewhat to the established methods of training and qualification and display some effort toward the achievement of such training and qualification. Although each student must select an acceptable method of training he still has some freedom to choose various acceptable methods.

    3.11 Objective: Each student participates in a training program that is necessary for entrance into his chosen career.

3.12 Objective: Each student participates in activities that are related to and expected in his chosen career.

3.13 Objective: Each student makes the adjusts necessary to maintain consistent progress toward the achievement of career goals.

3.2 Each student derives personal satisfaction and sense of worth from the pursuit of a career. The goal is for each student to interpret his chosen career as meaningful and satisfying to him. This implies involvement in a career that is reasonably consistent with the student's ability and interest. It also implies the acquisition of skills which are essential for adequate performance (by intrinsic standards) in his chosen career. Each student must see himself as fitting the "life style" of the career to which he is committed.

3.21 Objective: Each student understands within reasonable tolerances the relationship between his chosen career and his measured ability and interest.

3.22 Objective: Each student acquires a feeling of competence and adequacy in the performance of his chosen career.

3.23 Objective: Each student understands within reasonable tolerances the relationship between his aspired "life style" (values, mode of living, friends, rewards, etc.) and the "life style" of his chosen career.

3.3 Each student achieves success in the pursuit of career goals. The goal is for each student to follow through and complete his long-range career plans. Implicit in this goal is the constant striving toward success in his career as consistent with his ability. Thus employment in his chosen career is not an end in itself, but the mastery of one goal which leads to new goals.

3.31 Objective: Each student gains employment in a career which he has chosen.

3.32 Objective: Each student feels success in his
                     employment.

                            Social Domain

1.0 Perceptualization Objectives

1.1 Each student develops an awareness of social responsibilities,
     opportunities, and expectancies. The goal is for each student
     to become knowledgeable of the social setting within which he
     operates - including such groups as his family, peers, and
     significant others. The emphasis is on awareness of the
     opportunities and requirements of his social environment such
     as social expectations and social customs. It is important
     that he be able to differentiate his roles in the social groups
     with which he is or may be affiliated.

     1.11 Objective: Each student is aware of the social groups
                         that are a part of his social environment.

     1.12 Objective: Each student is aware of the need to
                         identify and affiliate with basic social
                         groups.

     1.13 Objective: Each student is aware of the need to have
                         friends.

     1.14 Objective: Each student is aware of his responsibili-
                         ties in primary social groups.

     1.15 Objective: Each student is aware of the behavioral
                         and other personal expectations of the
                         social groups with which he is affiliated.

     1.16 Objective: Each student is aware of the nature and
                         social acceptability of the attitudes and
                         values of social groups with which he
                         affiliates or which may be open to him.

     1.17 Objective: Each student is aware of the differing
                         skills needed for effective functioning in
                         social groups to which he belongs.

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1.2 Each student develops an awareness of self in the social
setting. The goal is for each student to develop an accurate
perception of himself with regards to the social groups with
which he affiliates (family, peers, and significant others).
The emphasis is on self-understanding of the social skills,
attitudes, and motivations. As a result of these understand-
ings each student can begin to clarify his role in different
social situations and identify with social groups appropriate
to his need structure and to social expection.

    1.21 Objective: Each student is aware of his ability and
limitations to function within his social
groups.

    1.22 Objective: Each student is aware of his attitudes
toward school work, and social participation.

    1.23 Objective: Each student is aware of his personal
characteristics that are related to social
acceptance and harmonious interpersonal
relationships.

2.0 Conceptualization Objectives

2.1 Each student develops an accurate concept of self in the social
setting. The goal is for the student to synthesize facts and
knowledge pertaining to himself and his social groups into
a rational and useful order. This conceptualization will
enable the student to evaluate his social affiliations, make
decisions and acquire value patterns. These affiliations,
decisions, and value patterns should move each student in a
direction of satisfying social relationships that are within
the normative behavioral tolerances of his school, family,
and community.

    2.11 Objective: Each student identifies and evaluates
opportunities for social affiliation and
chooses social groups that constructively
meet his needs.

    2.12 Objective: Each student understands and evaluates
characteristics and social roles related
to the expectations of his social groups.

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2.2 Each student develops an effective organization of effort
toward the achievement of satisfying and acceptable social
relationships. The goal is for each student to develop
adaptive and adjustive social behaviors. These behaviors
emphasize harmonious relationships which the student
achieves with his social environment through skill, judg-
ment and flexibility. While these behaviors are somewhat
complementary they can be differentiated in terms of the
techniques used to achieve the harmonious relationships.
Adaptive behavior implies a manipulation of the environ-
ment and adjustive behavior implies the modification of
personal behavior patterns to fit the existing conditions.
Thus each student must be able to select and affiliate with
social groups that will bring him satisfying relationships
and also be able to work effectively with groups in which
he has no choice of affiliation.

2.21 Objective: Each student is competent in solving
personal social problems through plan-
ning, decision-making, implementing
decisions, and evaluation.

2.22 Objective: Each student efficiently carries out
responsibilities as a member of a group.

2.23 Objective: Each student affiliates and participants
constructively in social groups that are
satisfying to him.

3.0 Generalization Objectives

3.1 Each student copes constructively with the demands of social
groups with which he is affiliated. The goal is for each
student to develop and to use consistently effective coping
behaviors in response to the demands of the social groups
(family, peers, and significant others) with which he affili-
ates. This implies a degree of conformity to the group
standards and a display of effort in the direction of meeting
these standards. It does not mean total submission by the
student, but does emphasize acceptable methods for reconciling
differences.

3.11 Objective: Each student takes responsibility in
reasonably adhering to the standards of
his social groups (family, peers, and
significant others).

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3.12 Objective: Each student expresses independent
                   social views in an acceptable fashion.

3.2 Each student attains personal satisfaction and a sense of
    worth from socially acceptable experiences. The goal is for
    each student to interpret his involvement in social activi-
    ties (within normative tolerances) as a meaningful and
    satisfying to him. This implies involvement in a social
    group that accepts him and whose values are reasonably
    consistent with his. Such involvement increases the prob-
    ability of recognition and esteem as an individual. The
    students' interpretation of probable recognition and esteem
    reinforces socially acceptable behavior.

    3.21 Objective: Each student understands within reasonable
                       tolerances the relationship between his
                       personal values and the values of the
                       group with which he affiliates.

    3.22 Objective: Each student identifies the role of
                       recognition and esteem in socially
                       acceptable groups.

    3.23 Objective: Each student demonstrates self-confidence
                       in his social relationships.

    3.24 Objective: Each student contributes creatively as he
                       is able to social relationships and groups
                       of which he is a part and gains a sense
                       of recognition for the contribution.

3.3 Each student demonstrates social adequacy. The goal is for
    each student to continue a display of social behavior that
    is within normative tolerances. Implicit in this goal is
    the reaching out for new social experiences and a display
    of competency in meeting them. This behavior is best
    evidenced by a lack of conflict in social activities.

    3.31 Objective: Each student makes contributions
                       (consistent with ability) to the social
                       groups of which he is a part.

    3.32 Objective: Each student actively seeks new social
                       experiences and copes with them adequately.

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Leisure-time Domain

1.0 Perceptualization Objectives

1.1 Each student develops an awareness of leisure-time activities.
The goal is for each student to become conscious of the various
"options" associated with the leisure time. Options pertain
to that wide variety of activities open for individual choice.
Some requiring training and skill development. It is important
that all individuals become aware of leisure options and the
need in today's world to plan and develop such activities.

1.11 Objective: Each student is aware of the training
requirements and needed skills for different
leisure activities.

1.12 Objective: Each student is aware of leisure roles and
social roles expected in different leisure
activities.

1.13 Objective: Each student is aware of differences between
necessary skills and expected role behaviors
in different leisure activities.

1.14 Objective: Each student is aware of the concept of
leisure in our society, the activity options,
and significant leisure-time activity trends.

1.2 Each student develops an accurate leisure awareness. The goal
is for each student to develop an accurate perception of him-
self in relation to leisure. The emphasis is upon each student's
understandings of his abilities, limitations, interests, and
motivations as related to leisure activities by perceiving his
desired leisure goals in relation to himself and to that
typical of leisure activities.

1.21 Objective: Each student is aware of his particular
leisure abilities, interests, and poten-
tialities, and limitations.

1.22 Objective: Each student is aware of his attitudes and
emerging values toward the various social
roles and leisure roles required when
involved in specified leisure activities.

2.0 Conceptualization Objectives

    2.1 Each student develops an accurate concept of self in relation
        to leisure activities. The goal is for each student to synthe-
        size facts and knowledge pertaining to himself and leisure
        activities into a rational and useful order. This conceptu-
        alization enables the student to make decisions formulate
        plans, and acquire value patterns pertaining to his future
        leisure options. These decisions, plans, and value patterns
        should move each student in a direction that is consistent
        with his interest and abilities and within the normative
        tolerances of his society.

        2.11 Objective: Each student makes a tentative choice of
                          leisure activities that is consistent
                          with his interests, aptitudes, and
                          abilities.

    2.2 Each student develops effective leisure activity patterns as
        requisite to the achievement of self-directed leisure goals.
        The goal is for each student to develop adaptive and adjustive
        behaviors as related to leisure activities. These behaviors
        emphasize harmonious relationships which the student achieves
        with his environment through skill, judgment, and flexibility.
        While these behaviors are somewhat complementary they can be
        differentiated in terms of the techniques used to achieve the
        harmonious relationship. Adaptive behavior implies a manipu-
        lation of the environment and adjustive behavior implies the
        modification of personal behavior patterns to fit the existing
        conditions. The acquisition of these behaviors will enable each
        student to meet changing environmental demands related to
        leisure and to perform at a level consistent with his ability.

        2.21 Objective: Each student identifies leisure alternatives
                          that are consistent with his ability and
                          claimed interests.

        2.22 Objective: Each student is competent in skills needed
                          for his leisure choices as appropriate to
                          his present developmental level and ability.

        2.23 Objective: Each student chooses hobbies, extra-curricular
                          activities, and exploratory leisure experiences
                          that are consistent with his interests and his
                          abilities.

        2.24 Objective: Each student develops an attitude that effort
                          consistent with his ability to perform leisure
                          tasks is important.

3.0 Generalization Objectives

3.1 Each student effectively implements leisure choices. The goal is
for each student to commit himself to leisure activities. This
implies that he conform somewhat to the established methods of
training and qualification where required and display some effort
toward the achievement of such training and qualification. Although
each student must select some m-thod of training where required he
still has freedom to choose various acceptable methods.

    3.11 Objective: Each student participates in a training program
as appropriate necessary for entrance into
chosen leisure activities.

    3.12 Objective: Each student participates in activities that are
related to and expected in chosen leisure
activities.

    3.13 Objective: Each student makes the adjustments necessary to
maintain consistent progress toward the achieve-
ment of leisure activity goals.

3.2 Each student derive personal satisfaction from the pursuit of leisure
activities. The goal is for each student to interpret his leisure-
time activities as meaningful and satisfying to him. This implies
involvement consistent with the students ability and interest. It
also implies the acquisition of skills which are essential for adequate
performance (by intrinsic and extrensic standards) in his chosen
leisure activities. Each student must see himself as relating to the
goals of the leisure activities to which he is committed.

    3.21 Objective: Each student understands within tolerances the
relationship between his chosen leisure activities
and his interests, aptitudes, and abilities.

    3.22 Objective: Each student acquires a feeling of competence and
adequacy in the performance of his chosen leisure-
time activities.

    3.23 Objective: Each student understands within broad tolerances the
relationship between his aspired leisure goals,
(values, mode of living, friends, rewards, etc.)
and the leisure goals of his chosen leisure
activities.

    3.24 Objective: Each student gains a sense of achievement in
leisure activities which he has chosen.

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3.25 Objective: Each student feels satisfaction in his leisure activities.

3.26 Objective: Each student expresses creativity in leisure activities, as he is able, and gains satisfaction from the experience.

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APPENDIX B

JOHNSON AND MITCHELL MATERIAL

(Definitions)

STATE OF CONNECTICUT

CAREER GUIDANCE NEEDS ASSESSMENT

Ages 13 and 17

The original Objectives in the Career Domain accepted by the Connecticut State
Department of Education form the basis for the needs and assessment instru-
ments developed by Johnson, Mitchell and Moore and Associates for students
at ages 13 and 17.

The objectives as stated, adapted from the NSG Taxonomy of Guidance Objectives,
are broad statements of direction, and as such are more goals than objectives.
Furthermore, few of them are operationally stated, and most of them are not
measurable as stated. This is totally appropriate, as needs and conditions
vary throughout any state; state adopted statements need to be broad and nomo-
thetic enough to be applicable to each district and school within the state,
yet idiographic enough to be meaningful in each setting. For purposes of
developing instruments for needs assessment within the state, the authors of
the instruments have selected from each objective those components that lend
themselves to measurement on objective instruments, without reference to each
student's own characteristics, plans and directed actions. Such instruments
will give the State Department of Education and individual districts infor-
mation about the status of career development, and management data for plan-
ning career development programs. They will not, however, provide adequate
information for the assessment of each pupil's status on a career development
continuum; individual districts/schools will need to supplement this effort
with specific criteria for assessing those areas that relate directly to the
appropriateness of individual students' plans and choices. These instruments
are planned to assess groups of students in relation to their knowledge of
occupational structure in our society, their knowledge of planning and decision
making techniques, and their ability to apply knowledge in simulated situations.
They assess programs, not individual students.

Many of the constructs addressed in the Connecticut objectives defy precise
definition, and therefore do not lend themselves to measurement. For instance,
consistency and universality are lacking in the perceptions of such constructs
as "work roles," "social roles," "training requirements," "attitudes,"
"values," etc. It would be a disservice to students, to districts, and to the
State Department of Education to gather data based on ambiguous test items
which would be subject to individual interpretation and to judgments related
to individual value systems.

To establish parameters which will insure the validity, reliability and mean-
ingful interpretation of the instruments, the attached definitions are presented.
These definitions of terms used in the objectives and in the instruments are
based on an exhaustive perusal of current professional literature, and are
related to commonly used references such as the Dictionary of Occupational
Titles. It is imperative that all objectives and test items be viewed in terms
of these definitions.

Occupational level is the vertical dimension along which occupations may be placed. The level of an occupation is determined by training time, education, training routes, work role emphasis, and work duties.

The levels used are:

1. Professional (and Managerial)
2. Semi-professional (and professional)
3. Highly skilled
4. Skilled
5. Semi-skilled
6. Unskilled

Social roles are the role expectations of the work position as related to job, community, and home.

Decision making is the process of choosing a strategy from alternatives to attain specific results. The choice is based on the components of values, information gathering, and alternative strategies.

Life style may be defined as one's characteristic pattern and quality of living.

Components of life style include personal care and adornment, nature of abode, inter-relationships with family and friends; productive activity; leisure time activity; intellectual activity; use of solitude. Each component is an expression of one's attitudes and values.

Contributors to life style are The Self (one's physical, intellectual, social, emotional being), the Life Space (one's physical world set in home, community and era), and the Situation (one's social and occupational roles); at each point in time these contribute to the development of one's Life Style.

Work role is defined as the perceived or written duties a worker has in an organization which include tasks to be performed and desired work attitudes.

Job satisfaction refers to the degree to which the worker's values and needs are fulfilled by his job activities.

The factors to be used are:

1. The economic factors, which include an occupation's income, its security, and its opportunities for advancement.

2. The relations with other persons and to other persons, including the consideration received from superiors, congenial associates, and opportunities to render service.

3. The direct satisfactions arising from the work itself, which include the quality and variety of interesting activities afforded by the occupation, the degree of independence permitted, and the opportunities for self-expression provided.

(Hopke, W.E. Dictionary of Personnel and Guidance Terms. Chicago: J. G. Ferguson Publishing Co., 1968)

Apprenticeship is a program of training for a recognized skilled trade, according to a written or oral judgment, whereby a worker receives two or more years of supervised on-the-job experience along with related instruction.

Job specialization occurs when the worker exercises a limited number of skills and abilities for the performance of a small number of jobs that result in diminished skills and abilities in other areas through disuse. The worker eventually will have limited residual skills that can be applied to other occupations and will realize that his experience, training, and functional capacity restricts his employment possibilities to a very small number of jobs. Job specialization also tends to remove the worker from identification with the final product, thus reducing opportunities for job satisfaction.

Training routes are the directions potential workers can take to acquire the job entrance requirements necessary for employment. These routes include on-the-job training, secondary schools, adult education, community colleges, four year colleges and universities, trade schools, technical schools, apprenticeship programs, professional schools, correspondence schools, and military services.

Occupational fields are the classifications of occupations in categories according to the numerous attributes of occupations and workers in them.

The field system used is the institutional clustering system as defined in the Dictionary of Occupational Titles.

1. Communication and Media
2. Construction
3. Personal Development and Recreation
4. Health, Family, and Public Welfare
5. Creative Arts
6. Education, Training and Research
7. Public Service
8. Transportation
9. Natural Resources - Production
10. Resources - Control and Conservation
11. Manufacturing
12. Commerce and Trade

Work is an activity (means) that produces something of value (ends) for the self and/or others. The ends are monetary gains, personal identity, personal meaning, and contributions to society.

Occupational trends are the projected directions of the labor market needs and opportunities including job classification extinction, modification, increase, and creation.

Work role emphasis refer to the fact that all work relates to data, people, or things - or combinations of these three.

Leisure is defined as the time blocks, social and recreational activities, and cultural opportunities available to the worker outside his working hours.

School subject areas:

Communication skills (reading, writing, speaking)
Mathematics
Science
Foreign Language
Social Studies
Fine Arts (music, drama, art)
Practical Arts (industrial arts, business, home economics)

REFERENCES

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Development. Harper and Brothers, 1957.

Herr, Edwin L. Vocational Guidance and Career Development in the Schools:
Towards a Systems Approach. Boston: Houghton Mifflin Company, 1972.

SCHEMA FOR CRITERION INSTRUMENTS
BASED ON CONNECTICUT GUIDANCE OBJECTIVES

Domains:	AWARENESS OF WORLD OF WORK	AWARENESS OF SELF	CONCEPT OF SELF IN RELATION TO WORLD OF WORK	ADAPTATION RELATED TO CAREER GOALS	COMMITMENT TO PURSUIT OF CAREER	SELF FULFILLMENT THROUGH PURSUIT OF CAREER
13 yr. olds	Concept of work Relationships between school and work Relationship of work to leisure activities Occupational structure	Work and social roles Abilities Interests Values	Choices consistent with ability interest, values Relationship between experiences and career choice Relationship between school subjects and occupations	Selecting career alternatives consistent with abilities and interests Relating rewards of work to job satisfaction	Choices of school and community activities consistent with chosen career	Relating ability levels to interest patterns and career levels Relating interests and values to occupational cluster
17 yr. olds	Concept of work Relationships between school and work Relationship of work to leisure activities Occupational structure Occupational trends Job specialization	Work and social roles Abilities Interests Values	Choices consistent with ability interest, values Relationship between experiences and career choice Relationship between post high school training and occupations	Identifying problem solving techniques Relating rewards of work to job satisfaction	Participation in training program Choices of school and community activities consistent with chosen career Making adjustments necessary to maintain progress forward Career goals	Relating ability levels to interest patterns and career levels Relating interests and values to occupational cluster

C/o = Concept of
A/o = Awareness of
P/o = Preceptualization of

Objective	Value	Variables
1.14	Work	Rewards, contributions
1.15	Occupational structure	Levels, fields, role emphasis
1.16	Occupational trends	Demand level
1.17	School/work relationship	Job skills/occupations
1.18	Occupation/leisure relationship	Leisure activities, occupational role
1.19	Specialization/satisfaction	
2.11	Career choice	Personal characteristics/ field role
2.12	Career choice bases	Life experience
2.13	Educational planning	Subject/occupation relations
2.21	Career/ability and interest	Occupations vs characteristics
2.22	Career planning skills	Problem solving techniques
2.24	Work satisfaction	Work/reward relations
3.11	Training requirements	Career competency requirements
3.12	Career facilitating activities	Co-curriculum/employability
3.13	Self-discipline/career	Career goals/activity choices
3.14	Career/self-characteristics	Occupation level x ability, interests

16 objectives
5 items/level
160 items

APPENDIX C

JOHNSON AND MITCHELL MATERIAL

TEST ITEM STRUCTURE

To insure that each item in the instruments is directly referenced to and representative of a specific criterion inherent in each objective, item forms have been developed for each objective to be assessed. These item forms will serve as devices for quality and consistency control in the development of items. Rigorous validation of each item in terms of each component of the item form is being conducted. The Delphi technique will be employed to obtain the opinions of experts in terms of the validity and appropriateness of each item only after all items have been field tested and modified as indicated.

The following pages present the measurable objectives that have been selected as representative of each of the functional levels of the career domain of guidance objectives: perceptualization, conceptualization and generalization. For each objective one or more item forms have been developed. A series of items is being constructed for each objective; these items will be field tested, and from them will be selected those that most consistently discriminate between students who have mastered the concept and those who have not. Because the items are criterion referenced, they are sensitive to instruction; given adequate instruction, all students should be able to respond correctly to each of the items. Therefore, the tests are true measures of the effectiveness of program, rather than measures of individual students.

1.14 Objective: Each student is aware of the concept of work in our society.

TASK: Identifying the rewards of work in our society including values, Means (contributions) and ends (monetary gains, society gains)

GENERAL DESCRIPTION: Student is given lists of means and ends and is asked to identify the rewards.

ITEM CHARACTERISTICS: The definition of work is found in the general statement.

INSTRUCTIONS TO STUDENTS: Clarify instructions for students for test items. Include statements as needed that the means and end gains are broad and may not apply to all persons in a given occupation.

CELL MATRIX:

I	II			III	
Occupational Levels	Means Contributions	Values		Ends Society	Monetary
1					
7					

REPLACEMENT SCHEME FOR FORM A & B: Each cell should be covered for 13 and 17 year old.

1.15 Objective: Each student is aware of the occupational structure in our
      society.

TASK: Identifying the components of occupational structure in our society
(occupational-levels, occupational-fields, and work role emphases) and their
relationships.

GENERAL DESCRIPTION: Student is given 3 sets of information - occupational
levels, occupational fields, and work role emphases. The student is asked
to specify the component to which each item from the cell matrix belongs,
and to relate items among components.

ITEM CHARACTERISTICS: Occupational levels, occupation fields, and work role
emphases are those defined in General Statement.
Format: must vary to address both components of the task - recognition of each
specific as belonging to one component of the occupational structure, and
recognition of interrelationships among and between components.

INSTRUCTIONS TO STUDENTS: No disclaimers

CELL MATRIX:

I	II	III
Occupational Levels	Occupational Fields	Work Role Emphases

See General Statement

SCHEME FOR FORMS A AND B: All relationships implied in cell matrix must
be covered.
All cells appropriate for 13 and 17 year olds.

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1.16 Objective: Each student is aware of significant occupational trends.

TASK: Identifying categories of occupations that will be in demand in the next decade and identifying categories of occupations that are becoming obsolete or are satiated with trained personnel.

GENERAL DESCRIPTION: The student is given tests of ascending and descending occupations and is asked to identify specific trends for occupations that will be needed in the next decade according to the Bureau of Labor Statistics as well as those that are satiated and/or declining in need.

ITEM CHARACTERISTICS: This information can be obtained from HRD Bureau of Labor Statistics.

INSTRUCTIONS TO STUDENTS: Clarify instructions to take test item. Include any clarifying statements you feel necessary.

CELL MATRIX: Suggestion only

I	II	III	IV
Occupational Levels	Diminishing	Increasing	Stable
1			
7			

REPLACEMENT SCHEME FOR FORMS A & B: The test items should cover both 13 and 17 year old categories.

1.17 Objective: Each student is aware of relationships between subject
      skills and occupations.

TASK: Relating skills mastered in school course work to those generally
useful in the world of work.

GENERAL DESCRIPTION: Student is given 3 sets of information - subject areas,
skills generally useful in the world of work, and occupations selected from
occupational fields by occupational level, and is asked to identify relation-
ships.

ITEM CHARACTERISTICS: Occupational levels and occupational fields are those
defined in General Statement. Subject areas are those defined in General
Statement. Occupations are selected so that each occupational field and
each occupational level is represented. Items are constructed to fully utilize
all three information dimensions.
Format: vary to go from subject area to occupation and from occupation to
subject matter.

CELL MATRIX

I	II	III	IV
Occupational Levels	Occupational Fields	Subject Areas	Occupations

See General Statement

INSTRUCTIONS TO SUBJECTS: No disclaimers

REPLACEMENT SCHEME - FORM A: Occupations should be those most commonly visible.
REPLACEMENT SCHEME - FORM B: Occupations could be those in demand, but less
visible to the teenager.

2.6

1.18 Objective: Each student is aware that a person's occupation affects the
      amount and kind of leisure activities he can pursue.

TASK: Identifying typical amounts and kinds of leisure activities that are
associated with or precluded by specific occupations.

GENERAL DESCRIPTION: The student is given scales of amounts and kinds of
leisure activity and is asked to identify typical leisure roles associated
with specific jobs within levels of occupations.

ITEM CHARACTERISTICS: Refer to the general statement

INSTRUCTIONS TO STUDENTS: Please give clear instructions for completing test
items. Include statements that you feel necessary such as, these leisure
roles are typical for the occupations mentioned but may not apply to each
person you may know at that occupational level.

CELL MATRIX:

Leisure Time

Occupations	Leisure Time Blocks	Activities	Cultural Opportunities
1			
7			

Refer to general statement

SCHEME FOR FORM A: For age 13 cells 2, 3, 4 should be assessed
SCHEME FOR FORM B: For age 17 all cells are to be assessed

2.7

1.19 Objective: Each student is aware of the effects of job specialization on job satisfaction.

TASK: Identifying relationships between the effects of job specialization and the degree and kinds of satisfaction derived from the job.

GENERAL DESCRIPTION: Student is given areas of job satisfaction and effects of job specialization and is asked to identify relationships.

ITEM CHARACTERISTICS: Typical components of job satisfactions are defined in the General Statement. Typical effects of job specialization are defined in the General Statement. Items are constructed to sample both limiting and enhancing effects of job specialization.
Format: vary from satisfactions to effects and from effects to satisfactions.

INSTRUCTIONS TO SUBJECTS: Instructions must contain statement that what may be perceived as a positive for one person may appear to be negative for another person.

CELL MATRIX:

I	II
Components of Job Satisfaction	Effects of Job Specialization

See General Statement

SCHEME FOR FORM A AND B: Interrelationships of all 3 sets of cells must be represented.

2.11 Objective: Each student makes a tentative choice of a segment (or level) of one occupational field that is consistent with his interests, aptitudes, and abilities.

TASK: Demonstrating ability to choose a level of one occupational cluster that is consistent with specified sets of interests, aptitudes, and abilities.

GENERAL DESCRIPTION: Student is given occupational levels, occupational fields and sets of student characteristics and is asked to choose an appropriate level of an occupational field for each set of student characteristics (interests, aptitudes, abilities).

ITEM CHARACTERISTICS: Occupational levels and occupational clusters are as defined in General Statement.
Items are constructed to sample student's ability to choose appropriate level-cluster for given sets of personal characteristics which represent several types of students.
Format: Vary to force student to interact with item content in several combinations.

INSTRUCTION TO STUDENT: Instructions must indicate that the question assumes that the student knows his interests, aptitudes, and abilities and gives him an opportunity to show that he knows how to use such knowledge in choosing an appropriate occupational level within a cluster.

CELL MATRIX:

I	II	III
Occupational levels	Occupational fields	Characteristics (interests, aptitudes, and abilities)

See General Statement

SCHEME FOR FORMS A AND B: All combinations for both forms.

2.12 Objective: Each student recognizes the relationship between life
experiences and career choice.

TASK: Recognizing how a given life experience will affect a career choice
or a change in careers.

CENERAL DESCRIPTION: The student is given examples of life experiences and
career choices and is asked to demonstrate his recognition that a life
experience will effect career decision and selection. Typical examples are
physical impairment might cause a shift from flying to a desk job; a loss of
a parent might cause immediate employment as oppcsed to college; draft in the
armed forces; marriage; moving, etc.

ITEM CHARACTERISTICS

INSTRUCTIONS: none

CELL MATRIX: Suggestion:

given occupation	given experience	choose appropriate occupation
1	1	1
2	2	2

OR

Simulation: Given this data set and this experience
/or/ plans to do, then experience, then what appro-
priate choice

SCHEME FOR FORMS A & B: The objective is to be assessed for both 17 and 13
year olds.

240

2.13 Objective: Each student applies his knowledge of the relationship
between school subject areas and occupations to preparing an educa-
tional plan.

TASK: Preparing an educational plan based on relationship between school
subject areas and occupations.

GENERAL DESCRIPTION: Student is given occupations and subject areas and is
asked to prepare related educational plans.

ITEM CHARACTERISTICS: Occupations are selected to be representative of
occupational levels and occupational fields as defined in General Statement.
School subjects areas are as defined in General Statement. Items are con-
structed to give student an opportunity to show how subject areas are
related to each occupational level.
Format: Vary from occupational to subject area to subject area to occupational.
Each cluster and each occupational level should be represented in the items.

INSTRUCTIONS TO STUDENTS: No disclaimers.

CELL MATRIX

I	II	III	IV
Occupational Levels	Occupational Fields	Occupations	Subject Areas

See General Statement

SCHEME FOR FORM A: Occupations used for 13 year olds should be those
commonly visible.
SHCEME FOR FORM B: Occupations for 17 year olds may be less visible but
should be occupations for which demand is strong.

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2.21 Objective: Each student identifies career alternatives that are consistent with ability and interest.

TASK: Selecting career alternatives consistent with ability and interests.

GENERAL DESCRIPTION: Student is given occupations and ability and interest sets and is asked to choose alternative occupations consistent with these sets.

ITEM CHARACTERISTICS: Career alternatives are defined as alternate occupational choices. Occupations selected must include several at the same occupational level (from the same or different occupational field) for each set of student ability and interest characteristics.
Occupational fields and occupational levels are as defined in General Statement. Items are constructed to sample student's ability to choose alternative occupations from within occupational fields and occupational levels appropriate to educational set of student ability and interest characteristics.
Format: Vary - occupations to characteristics, and characteristics to occupations. Each occupational field and each occupational level should be represented in the items.

INSTRUCTIONS TO STUDENT: Student must be impressed with the importance of thinking of career alternatives, while relating these alternatives to abilities and interests.

CELL MATRIX:

I	II	III	IV
Occupational Level	Occupational Cluster	Occupations	Ability & Interest Sets

SCHEME FOR FORM A: Occupations for 13 year olds should be those common and visible.
SCHEME FOR FORM B: Occupation for 17 year olds may be less visible, but in high demand.

2.22 Objective: Each student is competent in solving career problems through planning, decision making, implementing decisions, and evaluation.

TASK: Identifying appropriate problem solving techniques including planning, decision making, implementing decisions and evaluation.

GENERAL DESCRIPTION: (Through simulations) student is given a set of characteristics including abilities, values, interests, aptitudes, and is asked to demonstrate acceptable problem solving techniques.

ITEM CHARACTERISTICS: Refer to accompanying materials

INSTRUCTIONS TO STUDENTS: none

CELL MATRIX:

I	II	III	IV	V
Given Data	Planning	Decision Making	Implementation	Evaluation

1.

2.

3.

SCHEME FOR FORM A: 13 year olds must be assessed on Planning and Decision Making.
SCHEME FOR FORM B: 17 year olds must be assessed on all components of the cell matrix.

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2.24 Objective: Each student understands that there is a wide range in the degree and kinds of satisfaction that are derived from work.

TASK: Demonstrating an understanding that the rewards of work and the degrees of satisfaction will vary.

GENERAL DESCRIPTION: The student is given lists of typical rewards and degrees of rewards that are derived from work. Lists should include creation or establishing personal identity, personal meaning, monetary gains, (leisure time available, mobility) and constributions to society. The student is asked to show relationships between work and rewards.

ITEM CHARACTERISTICS: Refer to material/definitions in general statement

INSTRUCTIONS TO STUDENTS: none

CELL MATRIX: (Suggested)

Occupational Level	Rewards		
	Personal Identity	Personal Meaning	Contributions to Society
1			
7			

SCHEME FOR FORMS A & B: Both ages, 13 and 17, need to be assessed on all components of the Cell Matrix.

3.11 Objective: Each student participates in a training program that is necessary for entrance into his chosen career.

TASK: Independent student participation cannot be measured by machine scored instrument. The task has been modified to:
        Demonstrating ability to plan participation in a training program that is necessary for entrance into a chosen career. This becomes a conceptualization objective.

GENERAL DESCRIPTION: Student is given components of training programs and a list of occupations and is asked to plan participation in a training program for a specific occupation(s), by selecting appropriate training components.

ITEM CHARACTERISTICS: Occupations should be representative of various occupational levels and occupational clusters as defined in the General Statement.
Format: must allow for identification of selected occupations and training strategies.

INSTRUCTIONS TO STUDENTS: Instructions should include fact that participation in an appropriate training program can be verified only by observation of student's activities. Ability to plan such participation is being assessed here.

CELL MATRIX:

I	II	III	IV
Occupational Levels	Occupational Clusters	Occupations	Training Programs

SCHEME FOR FORM A: None. Not appropriate for 13 yr. olds.
SCHEME FOR FORM B: Appropriate for 17 year olds. All components should be covered.

3.12   Objective: Each student participates in activities that are related to
       and/or expected in his chosen career.

TASK: Choosing appropriate or typical school and community based activities
that will assist in preparation for a chosen career.

GENERAL DESCRIPTION: The student is given course subjects, campus activities,
community opportunities that typically are related to and will enhance a
specified career, and is asked to show relationships.

ITEM CHARACTERISTICS

INSTRUCTIONS TO STUDENTS: none

CELL MATRIX:

I	II	III	IV
Occupational Level	School Subjects (Emphasis on)	School Activities	Community Activities
1.	Math/Science Language Math/English	State Government Art Club Music Car	Part-time Work Volunteer Work
7.			

3.21 Objective: Each student will apply his knowledge of the relationship between his chosen career and his measured ability and interest.

TASK: Showing relationships between typically accepted ability levels and interest patterns and career levels.

GENERAL STATEMENT: The student will be given ability levels, interest patterns, and sample occupations and will be asked to show relationships.

ITEM CHARACTERISTICS: Refer to charts supplied in the general statement. Use simulation and/or matching.

INSTRUCTIONS TO STUDENTS: none

CELL MATRIX:

I	II	III	IV
Occupational Level	Ability (Verb/Math)	Interests	Specific Occupations
1	High		
2	High Average		
3	Average		
4	Low Average		
5	Low		

SCHEME FOR FORMS A & B: Each cell is assessed for both 13 and 17 year old students.

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APPENDIX D

FIELD MATERIALS

CONTENTS

ASSESSMENT INSTRUMENT FOR 13 YEAR OLDS (LEVEL A)
ASSESSMENT INSTRUMENT FOR 17 YEAR OLDS (LEVEL B)
INSTRUCTION SCRIPT
LETTER TO SUPERINTENDENTS WITH ENCLOSURES
LETTER TO PRINCIPALS WITH ENCLOSURES
TRANSFER FORM

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CAREER GUIDANCE ASSESSMENT
PROJECT
1974

LEVEL A

Prepared by

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for the
CONNECTICUT STATE DEPARTMENT OF EDUCATION
BUREAU OF PUPIL PERSONNEL AND SPECIAL EDUCATIONAL SERVICES

A Project funded by ESEA, Title III,
Guidance, Counseling and Testing

246

You have been chosen to take part in a statewide study of students your age. The purpose of this study is to give people who are interested in education some information about the knowledge, skills and attitudes of young people from all over Connecticut. With this information we can find out what progress this state is making in reaching its educational goals.

This test has been designed to determine how much you know about choosing a career. You should do the very best you can so that we can get accurate information about the career planning and decision-making skills of people your age. Your name will <u>not</u> be on any materials leaving the school, and your answers will <u>not</u> be shown to anyone in your school.

The directions for what you are to do are printed in this booklet. It is important that you follow the directions carefully so that you will understand how to mark your answers. Mark your answers only in the spaces provided, and MARK ONLY ONE ANSWER FOR EACH ITEM.

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114 JOB SATISFACTION

Working in a large hotel, restaurant, or institution, the <u>Kitchen Helper</u> contributes to the work of a number of specialty cooks, as for example, the fry cook, roast cook, salad girl, and others.

<u>Kitchen Helpers</u> bring supplies from the storeroom, and clean and prepare vegetables and fruits for cooking or serving, and keep work areas and counters clean and uncluttered.

What kind of job satisfaction might a <u>Kitchen Helper</u> expect from his job?

CHECK ALL ITEMS THAT USUALLY APPLY IN THE "YES" COLUMN AND ALL ITEMS THAT DO NOT APPLY IN THE "NO" COLUMN.

		<u>YES</u>	<u>NO</u>
1.	He will receive the recognition of his fellow workers.	1____	2____
2.	He will have independence on the job.	1____	2____
3.	He will be a member of a production team.	1____	2____
4.	He will be in a position to learn many of the ins-and-outs of the food service industry.	1____	2____
5.	With talent and application he will be in line for a promotion.	1____	2____

115 OCCUPATIONAL LEVELS, OCCUPATIONAL FIELDS, WORK EMPHASIS

In each of the items below, you are to determine what is being described: an Occupational Level, an Occupational Field, or a Work Role Emphasis (people, data, things). In one of the three spaces after each item, mark an "X" in the column you select, as shown in the example.

	LEVEL	FIELD	EMPHASIS
EXAMPLE:			
People who work with things	___	___	_X_
6. People who are skilled	1___	2___	3___
7. Persons who work in Construction	1___	2___	3___
8. Persons who are semi-skilled	1___	2___	3___
9. Persons who work with Creative Arts	1___	2___	3___
10. Persons who work in Manufacturing	1___	2___	3___

116 OCCUPATIONAL TRENDS

Below is a list of occupations. For each occupation place an "X" in
one of the columns at the right to show whether, during the next ten
years, that occupation will need MORE workers, the SAME number of
workers, or FEWER workers, than are needed now.

		MORE	SAME	FEWER
EXAMPLES:				
	Registered nurse	X	____	____
	Auto mechanic	____	X	____
11.	Super-market manager	1____	2____	3____
12.	Able seaman	1____	2____	3____
13.	Dental Assistant	1____	2____	3____
14.	Electrical engineer	1____	2____	3____
15.	Business machine repairman	1____	2____	3____

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117   OCCUPATIONAL LEVELS AND EDUCATION

For each of the occupations listed below, place an "X" in the column
at the right that shows the level of education usually expected to
enter the occupation.

USUALLY EXPECTED LEVEL OF EDUCATION

*(Note: High School includes Connecticut
Vocational-Technical Schools)

OCCUPATION	At least 4 years of college	Schooling after High School*	High School* Graduation Only	Less than High School* Graduation
EXAMPLES:				
Soil conservationist	X	___	___	___
Rotary driller	___	___	___	X
16. Secretary	1___	2___	3___	4___
17. Meatcutter	1___	2___	3___	4___
18. Electronics technician	1___	2___	3___	4___
19. Electrical engineer	1___	2___	3___	1___
20. Roughneck (oil field)	1___	2___	3___	4___
21. Draftsman	1___	2___	3___	4___

118 OCCUPATIONS AFFECT THE AMOUNT OF LEISURE TIME

Some kinds of work leave more time for fun, recreation, and hobbies
than others. For each of the Occupations listed below place an "X"
in the column at the right to show the amount of LEISURE TIME you
think each worker might have. (Average leisure time is for a worker
who is employed eight hours a day, five days a week, with a two to
three week paid vacation, and holidays off.)

LEISURE TIME

	Above Average	Average	Below Average
EXAMPLES:			
File Clerk	____	X	____
Teacher	X	____	____
Automobile Salesman	____	____	X
22. Sales Clerk	1____	2____	3____
23. Airline Pilot	1____	2____	3____
24. Dairy Farmer	1____	2____	3____
25. Television Repairman	1____	2____	3____
26. Librarian	1____	2____	3____

QUESTIONS 27 TO 31 DEAL WITH THE REASONS PEOPLE LIKE OR DISLIKE THEIR
JOBS AND THE DEGREE OF SPECIALIZATION THERE IS TO A SPECIFIC JOB.   IT IS
IMPORTANT TO REMEMBER THAT PEOPLE MAY LIKE OR DISLIKE A JOB FOR DIFFERENT
REASONS.   READ THE STORY FIRST AND THEN ANSWER THE QUESTIONS.   MARK YOUR
ANSWERS (WITH AN "X") AS THOUGH YOU WERE THE PERSON IN THE STORY RATHER
THAN THE WAY YOU FEEL ABOUT THE DETAILS OF THE JOB.

Sam is a taxi driver and has worked for the same company in a large
city for seventeen years. He is very proud of his record because
he hasn't had any traffic tickets or accidents since he was employed
with his company. Sam dropped out of high school at age sixteen.
He served time in the military service as an infantry man. He has
had no formal training since high school, and taxi driving is the
only job he has ever had. He is married and has two children. Sam
would like to make more money so that his family could have more of
the pleasures in life, but he is earning the top amount of money
possible for a taxi driver and he is afraid to try any other job
because of his lack of education and other job experience. Sam plans
to continue driving a cab at least until his children leave home and
are on their own.

27. The value of earning more money as a job satisfaction factor
     for Sam appears to be:

     1____ High

     2____ Average

     3____ Low

     4____ Can't say, not enough information given

28. The actual value of driving a taxi as it appears to Sam seems to be:

     1____ High

     2____ Average

     3____ Low

     4____ Can't say, not enough information given

29. If Sam were to quit his job and try another one, what amount of
     success does it appear that he would have in maintaining the same
     standard of living for his family:

     1____ High

     2____ Average

     3____ Low

     4____ Can't say, not enough information given

30. As a taxi driver, how much does it appear that Sam desires social relations with other people while he is on the job?

   1____ High

   2____ Averace

   3____ Low

   4____ Can't say, not enough information given

31. Sam seems to give the importance of job security a rating of:

   1____ High

   2____ Average

   3____ Low

   4____ Can't say, not enough information given

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YOUR UNDERSTANDING OF YOUR OWN INTERESTS AND ABILITIES WILL HELP YOU
TO MAKE CAREER PLANS MORE WISELY. EACH OF THE FOLLOWING ITEMS GIVES
YOU INFORMATION ABOUT THE ABILITIES AND INTERESTS OF A STUDENT YOUR
AGE, AND LISTS SOME POSSIBLE FUTURE OCCUPATIONS THE STUDENT MAY CONSIDER.
MANY JOBS MIGHT BE APPROPRIATE, BUT FROM THOSE LISTED YOU ARE ASKED TO
SELECT THE OCCUPATION WHICH SEEMS BEST SUITED FOR THE PERSON DESCRIBED.
MARK ONLY ONE CHOICE FOR EACH ITEM.

32.   Carolyn has won a prize for a chemistry exhibit at a state fair.
       Her highest grades are in science, but she is weak in art and music.
       She scores very high on general tests of intelligence. She does
       volunteer work in the community hospital on weekends and likes to
       work directly with people. After college, she would like to attend
       graduate school.

       Which of the following occupations seems best suited to Carolyn's
       characteristics:

       1____ medical illustrator

       2____ laboratory assistant

       3____ physician

       4____ medical receptionist

33.   Henry is considered a good leader. Last year, as president of the
       Student Council, he enjoyed planning and leading Council activities.
       He loves sports, and plays on his school baseball team. He earns
       average grades in school, but low grades in science and English.
       After college, Henry would like to find a job in sports which makes
       use of his leadership ability.

       For which of the following occupations does Henry seem best suited?

       1____ athletic coach

       2____ scoreboard operator

       3____ doctor for football team

       4____ sports writer

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34. Mike enjoys working with his hands. His highest grades are in shop class and he has better than average mechanical aptitude. Mike is well-liked by classmates, but he is a better follower than a leader. After high school he would like to begin working at a job that will pay reasonably well. He would like to work out-of-doors.

Which of the following jobs would probably be best for Mike to consider?

1____ plumber

2____ construction worker

3____ construction foreman

4____ president of construction company

35. Barry has always done well in school, especially in English and creative writing. And he has printed a small newspaper for neighbors and friends. He works on his school paper, and particularly likes assignments which involve interviewing people. He was editor of the school paper one semester, but did not like the work much, because he had to do more supervising and less writing.

Of the following jobs, which would probably be best for Barry?

1____ newspaper copy boy

2____ novelist

3____ newspaper publisher

4____ newspaper reporter

36. Elaine enjoys working with children. During her free period, she works with a fourth grade teacher, helping pupils with reading and math. She would like to find a summer job as a camp counselor, so that she can continue to work directly with young children. She expresses herself well when speaking and does well in tasks that involve clerical detail. Elaine could succeed in college, but wouldn't want to spend more than two years in college. Eventually, she would like to get married and raise a family.

Which of the following jobs fits best with Elaine's interests and abilities?

1____ teacher aide

2____ school bus driver

3____ school principal

4____ school superintendent

IN EACH OF THE FOLLOWING ITEMS, YOU ARE GIVEN INFORMATION ABOUT A PERSON.
YOU ARE THEN GIVEN THREE OCCUPATIONAL CHOICES HE OR SHE MIGHT CONSIDER.
WITH THE INFORMATION YOU HAVE, YOU ARE ASKED TO DECIDE WHETHER EACH JOB
CHOICE IS LIKELY TO WORK OUT WELL FOR THAT PERSON. MARK ONLY ONE ANSWER
FOR EACH ITEM.

Frank and Mary were married after high school graduation. He had made
"C's" in most subjects with a few "B's". Frank took a job as a truck
driver so that they could afford to start raising a family. They have
been married six years, and have two children. Frank has never really
enjoyed his job, and would prefer work related to mechanics or engineering.
He has not changed jobs because he could not afford to take time off for
additional schooling or training. Recently, however, Frank inherited some
money from a relative. He can use the money to support his family for
one or two years while he prepares for work that he will find more satis-
fying. Following are some things Frank may now consider doing.

Indicate whether each seems an appropriate choice by marking an "X" in
the space provided.

37. Study to become an engineering technician

    1____very likely   2____somewhat likely   3____very unlikely

?8. Become a bus driver

    1____very likely   2____somewhat likely   3____very unlikely

39. Study auto mechanics in trade school

    1____very likely   2____somewhat likely   3____very unlikely

Marie is a 26 year-old professional singer. She studied voice and organ
in college, and played the organ in church. Last month she began complain-
ing of a sore throat. The doctors found a small growth on her vocal chords,
hospitalized her, and removed the growth. While Marie can still speak,
her singing voice has been impaired. She would like to continue working
in the field of music, even if she can no longer sing. As she must continue
to earn a steady income, she does not want to switch to a job that requires
additional training or schooling. Following are some jobs that Marie might
consider.

After each job, indicate whether it seems likely that this would be a
good choice for her.

40. Organ teacher

     1___very likely   2___somewhat likely   3___very unlikely

41. Nurse

     1___very likely   2___somewhat likely   3___very unlikely

42. Professional organist

     1___very likely   2___somewhat likely   3___very unlikely

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213 RELATIONSHIPS BETWEEN SCHOOL SUBJECT AREAS AND OCCUPATIONS IN PREPARING
AN EDUCATIONAL PLAN.

IN EACH OF THE FOLLOWING PARAGRAPHS, YOU ARE GIVEN INFORMATION ABOUT A
STUDENT. FROM THE INFORMATION GIVEN, SELECT THE MOST APPROPRIATE CAREER
PLAN FOR EACH STUDENT BY MARKING AN "X" IN ONE OF THE SPACES PROVIDED.

43. Bob is a friendly eighth grade boy who gets average marks. He works
fairly hard and finds that he has some trouble with science and math
courses. He doesn't like the practical arts courses. His best
grades are in communications courses, and he likes public speaking.
The high school program he has outlined includes many communications
courses and some business courses. These courses would suggest that
Bob is seriously thinking about becoming:

1____ an author

2____ a salesman

3____ a designer

4____ a druggist

44. John and his counselor have agreed that John should give serious
consideration to engineering as a career objective. To attain this
goal, John should plan to take and do well in:

1____ fine arts and social studies

2____ science and mathematics

3____ foreign languages and communications skills

4____ practical arts and fine arts

45. Mary is an eighth grade girl who has performed well in communications
and mathematics classes. She likes to work with words and has a good
memory. Her folks have taken her on a number of trips and she thinks
she would like to become an interpreter and work in a foreign country.
A school program that would take advantage of her interests and abili-
ties and would help her plans would include:

1____ social studies, communications, and foreign language

2____ mathematics, foreign language, and social studies

3____ science, social studies, and mathematics

4____ communications, foreign language, and fine arts

213   RELATIONSHIPS BETWEEN SCHOOL SUBJECT AREAS AND OCCUPATIONS IN PREPARING
        AN EDUCATIONAL PLAN.   (CONTINUED)

46.   Helen took a course in career planning. She learned that her most
      promising fields were (1) Commerce and Trade and (2) Health, Famil_
      and Public Welfare. She considered a number of occupations and chose
      the following as her most promising: secretary, bookkeeper, and sales-
      person. Which one of the following education plans is most realistic
      for Helen?

      1____ a high school and four-year college program with concentration
            on math and science courses

      2____ a high school and four-year college program with concentration
            on communication and business courses

      3____ a high school and two-year college program with concentration
            on business and communications courses

      4____ a high school and two-year college program with concentration
            c social studies and science courses

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221 IDENTIFYING CAREER ALTERNATIVES THAT ARE CONSISTENT WITH ABILITIES
     AND INTERESTS

IN EACH OF THE FOLLOWING PARAGRAPHS YOU ARE GIVEN INFORMATION ABOUT A
STUDENT. FROM THE INFORMATION GIVEN, YOU ARE TO SELECT THE MOST APPROPRIATE
CAREER POSSIBILITIES FOR EACH STUDENT BY PLACING AN "X" IN ONE OF THE
SPACES PROVIDED.

47. Mary is an excellent student. She plays a violin in the school band
     and shows good taste in clothes that she makes. She receives A's and
     B's in communications, fine arts, and social studies. She is less
     successful in science and mathematics. She expresses interest in
     writing, in all artistic activity, and in being with people. She
     dislikes mathematics and has neutral feelings about science. She has
     given her future considerable thought. She plans to finish high
     school and go to college to prepare for one of two occupations. Which
     pair of occupations do you feel fit most closely to Mary's pattern of
     abilities and interests?

     1____ society editor and technical writer

     2____ chemist and biologist

     3____ musical director and art critic

     4____ statistician and accountant

48. Jan's mother wanted her to be a music teacher when she finished school.
     Jan wasn't sure. Her marks were in the C range with more D's than B's.
     She liked singing, working with people, taking notes and keeping records.
     She was able to spell accurately and had good finger dexterity. She
     planned to take as many business and communication courses as she could
     in high school. Her best occupational objectives would seem to be:

     1____ music teacher or choir director

     2____ typist or secretary

     3____ nurse or social worker

     4____ librarian or dietitian

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49. Frank is an eighth grade student. At the present time, he is planning
on being a doctor. He has just completed a career planning program.
He has learned that he has abilities and interest in mathematics and
scientific activities. He has interests in the arts but not much
artistic ability. His reading skills are average and he has average
skills in working with people. He has been asked to identify some
alternative occupations to consider in case the medical plans don't
work out and he decides not to attend a four year college. Some
occupations are:

1____ X-ray technician, chemical technician, and engineering assistant

2____ chemist, physicist, and accountant

3____ teacher, social worker, and clergyman

4____ nurseryman

50. John told his counselor that he knew what he was going to do for a
living. He was going to be a baseball player. His counselor asked
him what he planned to do on the off season and after he was too old
to play ball. John realized he needed an alternate plan. He recognized
that school didn't appeal much to him so he didn't plan to go far
beyond high school. He enjoyed being with people and he had average
mathematics and communications skills. He could talk people into
doing things his way without making them angry. He was "all thumbs"
when working with mechanical devices. From this information it appears
he should explore which two occupations:

1____ life insurance salesman and real estate salesman

2____ tool and die maker and machinist

3____ baseball coach and school counselor

4____ building contractor and engineer

51. George is a high school senior who has had trouble with social studies
and communications subjects. He has always enjoyed working with
mechanical objects and he has performed well in shop classes. His
hobbies have included making model cars and airplanes and tearing down
and repairing motors. He can work most problems in general math and
algebra but hasn't tried advanced math. His career plans might include
such jobs as:

1____ engineer, draftsman, and architect

2____ orderly, porter, custodian

3____ electronic assembler, ranch hand, stock clerk

4____ mechanic, plumber, pattern maker

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More than one decision is needed to choose a career. Some of these
decisions are shown below in mixed up order. First read all the
decisions. Then, in the space provided next to each decision place a
number from one to seven to indicate your choice as to which decision
should be made first (write in a "1"), which decision should be made
second (write in a "2"), etc.

	DECISION	ORDER
52.	Take action on your plans.	_____
53.	Choose among alternative plans or goals.	_____
54.	Define the problem.	_____
55.	Review your plan periodically.	_____
56.	Gather relevant information.	_____
57.	Weigh the evidence gathered.	_____
58.	Revise plans and actions when required.	_____

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224 SATISFACTION DERIVED FROM WORK

PLACE AN "X" IN ONE OF THE SPACES PROVIDED FOR WHAT YOU THINK IS THE
MOST APPROPRIATE ANSWER TO EACH QUESTION.

59. In which of the following occupations is a person most likely
to receive public recognition and appreciation?

1____ Nurse

2____ Teacher

3____ Entertainer

4____ Truck driver

60. In which of the following occupations is a person most likely to
be recognized for exceptional mastery and achievement?

1____ Writer

2____ Barber

3____ Social worker

4____ Priest

61. In which of the following occupations is a person most likely to
achieve a sense of belonging?

1____ Auto salesman

2____ Accountant

3____ Radio announcer

4____ Soldier

62. Which of the following occupations would provide a person with the
greatest responsibility for controlling and directing others?

1____ Policeman

2____ Ship's Captain

3____ Personnel Manager

4____ Lawyer

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63. Which occupation would provide a person with the maximum opportunity for creativity?

1____ Clerk

2____ Laborer

3____ Assembly line worker

4____ Architect

64. Which occupation would probably provide a person with the highest income?

1____ Teacher

2____ Laboratory technician

3____ Civil Engineer

4____ Cook

65. Which occupation would probably provide a person with the most opportunity for the expression of personal values in his work?

1____ Laborer

2____ Laboratory technician

3____ Minister

4____ Engineer

66. Which of the following occupations would allow a person to be free from the care and worry involved in supervising others on the job?

1____ Foreman

2____ Director of operations

3____ Airline pilot

4____ Clerk

67. Which of the following occupations would provide a person with the most opportunity to directly help and serve others?

1____ Bricklayer

2____ Truck driver

3____ Social worker

4____ Carpenter

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68. Which of the following occupations would allow a person to express the most creativity on the job?

    1____ Machinist

    2____ Accountant

    3____ Airline pilot

    4____ Industrial designer

69. Which of the following employers would provide an employee with the most regular (steady) income?

    1____ Farming

    2____ Civil Service

    3____ A small business

    4____ Large manufacturing corporation

70. Which of the following occupations would provide a person with the most independence on the job?

    1____ Teacher

    2____ Draftsman

    3____ Farm worker

    4____ Production line worker

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311 TRAINING PROGRAMS FOR OCCUPATIONS

What education or training is generally expected or required for each of these occupations? Mark one choice for each occupation as shown in the example.

OCCUPATION	General High School or Less	Vocational-Technical School	Apprentice-ship	Post Secondary Schooling	Four Years or More of College
EXAMPLE:					
Practical Nurse		X			
71. Waitress – Waiter	1	2	3	4	5
72. Glass Blower	1	2	3	4	5
73. Hospital Attendant	1	2	3	4	5
74. Social Worker	1	2	3	4	5
75. Air Conditioning & Refrigeration Mechanic	1	2	3	4	5
76. Blacksmith	1	2	3	4	5
77. Pharmacist	1	2	3	4	5
78. Occupational Therapy Technician	1	2	3	4	5
79. Automobile Salesman	1	2	3	4	5
80. Engineer	1	2	3	4	5

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312 ACTIVITIES RELATED TO CAREERS

IN EACH OF THE ITEMS BELOW, PLACE AN "X" IN THE SPACE IN FRONT OF THE
ONE STATEMENT YOU THINK IS THE MOST APPROPRIATE.

Eric and Sally are in the 8th grade. Tney say they want to select
courses and activities that will help them to become commercial airline
pilots (highly skilled).

81. Mark the most appropriate type of training that will help them
    reach this occupational level.

    1____ On the Job Training

    2____ Four Year College Training

    3____ Private Training Program

    4____ Armed Forces Training Program

82. Mark the most appropriate school level emphasis to reach this
    occupational level.

    1____ Fine Arts

    2____ Math/Science

    3____ Communication Skills

    4____ Practical Arts

83. Mark the most appropriate school activity to reach this occupational
    level.

    1____ Explore this field in a career planning group

    2____ Go on field trips to local aircraft plant

    3____ Discuss job opportunities with pilots

    4____ Join an aviators club

84. Mark the most appropriate community activity that they can do to
    reach this occupational level.

    1____ Join a model airplane club

    2____ Do part-time work at an airport

    3____ Do volunteer work at a travel agency

    4____ Enroll in Red Cross First Aid course

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312 ACTIVITIES RELATED CAREERS   (CONTINUED)

Debbie and John, eighth grade students, are planning to become police officers.

85. Mark the most appropriate type of training that will help them enter this occupation.

1____ On the job training

2____ Apprenticeship training

3____ Four years of college

4____ State Technical College

86. Mark their most appropriate high school course of study emphasis.

1____ Social Science Courses

2____ Physical Education

3____ Practical Arts Courses

4____ Math/Science Courses

87. Mark the most appropriate community activity for them to participate in.

1____ Volunteer work or club work in the community

2____ Join an athletic team

3____ Study about police work on their own

4____ Interview police officers

321 RELATIONSHIPS AMONG OCCUPATIONAL LEVEL, MEASURED VERBAL ABILITY,
     MATH ABILITY, AND INTERESTS

For each occupation listed below there is <u>one job fact that is wrong.</u>
Find it and mark it with an "X", as shown in the example.

	OCCUPATION	Occupational level	Verbal Ability	Math Ability	Interests
EXAMPLE:					
	Mailman	___unskilled	___low	___low	X ideas things
88.	Farmhand	1___skilled	2___low	3___low	4___things outdoors
89.	Television Announcer	1___semi-skilled	2___high average	3___average	4___people data
90.	Chemical Lab Technician	1___semi-skilled	2___average	3___high average	4___things
91.	Speech Teacher	1___profes-sional	2___average	3___high average	4___people ideas
92.	Registered Nurse	1___skilled	2___high average	3___average	4___people data

1. In the last twelve months, have you been in a program of career guidance or career education?

1____ Yes

2____ No

2. In the last twelve months, have you discussed future plans with a School Guidance Counselor?

1____ Yes

2____ No

3____ Don't Remember

3. Are you planning to attend a vocational-technical school?

1____ Yes

2____ No

3____ Undecided

4. Have you decided on the kind of job you want to go into?

1____ Yes

2____ No

5. I am

1____ Female

2____ Male

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CAREER GUIDANCE ASSESSMENT
PROJECT
1974

LEVEL B

Prepared by

Clarence D. Johnson
Anita M. Mitchell, Ed. D.

for the
CONNECTICUT STATE DEPARTMENT OF EDUCATION
BUREAU OF PUPIL PERSONNEL AND SPECIAL EDUCATIONAL SERVICES

You have been chosen to take part in a statewide study of students your age. The purpose of this study is to give people who are interested in education some information about the knowledge, skills and attitudes of young people from all over Connecticut. With this information we can find out what progress this state is making in reaching its educational goals.

This test has been designed to determine how much you know about choosing a career. You should do the very best you can so that we can get accurate information about the career planning and decision-making skills of people your age. Your name will <u>not</u> be on any materials leaving the school, and your answers will <u>not</u> be shown to anyone in your school.

The directions for what you are to do are printed in this booklet. It is important that you follow the directions carefully so that you will understand how to mark your answers. Mark your answers only in the spaces provided, and MARK ONLY ONE ANSWER FOR EACH ITEM.

The occupation of <u>Clerk-typist</u> is regarded favorably by many persons for the following reasons:

CHECK ALL ITEMS THAT USUALLY APPLY IN THE "YES" COLUMN AND ALL ITEMS THAT DO NOT APPLY IN THE "NO" COLUMN.

		YES	NO
.	The required tasks are so well organized that instructions are usually unnecessary.	1___	2___
2.	The job is a stepping-stone to higher paying clerical positions.	1___	2___
3.	Work assignments vary from day to day.	1___	2___
4.	The pay is adequate enough to support a family of two adults and two children.	1___	2___
5.	The job has maximum security.	1___	2___
6.	There are many chances for creative self expression.	1___	2___
7.	The responsibilities include decision making in general administrative policies.	1___	2___

115   OCCUPATIONAL LEVELS, OCCUPATIONAL FIELDS, WORK EMPHASIS

In each of the items below, you are to determine what is being described:
an Occupational Level, an Occupational Field, or a Work Role Emphasis
(people, data, things). In one of the three spaces after each item,
mark an "X" in the column you select, as shown in the example.

	LEVEL	FIELD	EMPHASIS

EXAMPLE:

	LEVEL	FIELD	EMPHASIS
Persons who work in Health, Family & Public Welfare	___	X	___

		LEVEL	FIELD	EMPHASIS
8.	Persons who ar highly skilled at their work	1___	2___	3___
9.	Persons who are employed in Public Service	1___	2___	3___
10.	Persons who work with people	1___	2___	3___
11.	Persons who work in Communications and Media	1___	2___	3___
12.	Persons who are professional	1___	2___	3___

116 OCCUPATIONAL TRENDS

Below is a list of occupations. For each occupation, place an "X"
in one of the columns at the right to show whether, during the next
ten years, that occupation will need a GREATER percentage of workers,
a SMALLER percentage of workers, or about the SAME percentage of workers,
than are needed now.

		GREATER %	SAME %	SMALLER %
EXAMPLES:				
	Accountants	___	___	**X**___
	Dental hygienists	**X**___	___	___
13.	Mathematicians	1___	2___	3___
14.	Actors and actresses	1___	2___	3___
15.	Foresters	1___	2___	3___
16.	Office machine operators	1___	2___	3___
17.	Elementary teachers	1___	2___	3___
18.	Computer programmers	1___	2___	3___

For each of the occupations listed below, place an "X" in the column
at the right that shows the level of education usually expected to
enter the occupation.

USUALLY EXPECTED LEVEL OF EDUCATION

*(Note: High School includes Connecticut
Vocational-Technical Schools)

OCCUPATION	At least 4 years of college	Schooling after High School*	High School* Graduation Only	Less than High School* Graduation
EXAMPLE:				
Soil conservationist	X	___	___	___
Rotary driller	___	___	___	X
19. Secretary	1___	2___	3___	4___
20. Meatcutter	1___	2___	3___	4___
21. Electronics technician	1___	2___	3___	4___
22. Electrical engineer	1___	2___	3___	4___
23. Roughneck (oil field)	1___	2___	3___	4___
24. Draftsman	1___	2___	3___	4___

118   OCCUPATIONS AFFECT THE AMOUNT OF LEISURE TIME

Some kinds of work leave more time for fun, recreation, and hobbies
than others. For each of the Occupations listed below place an "X"
in the column at the right to show the amount of LEISURE TIME you
think each worker might have. (Average leisure time is for a worker
who is employed eight hours a day, five days a week, with a two to
three week paid vacation, and holidays off.)

LEISURE TIME

	Above Average	Average	Below Average

EXAMPLES:

	Above Average	Average	Below Average
File Clerk	____	X	____
Teacher	X	____	____
Automobile Salesman	____	____	X

		Above Average	Average	Below Average
25.	Sales Clerk	1____	2____	3____
26.	Airline Pilot	1____	2____	3____
27.	Dairy Farmer	1____	2____	3____
28.	Television Repairman	1____	2____	3____
29.	Librarian	1____	2____	3____
30.	Gasoline Station Attendant	1____	2____	3____
31.	Bank President	1____	2____	3____

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QUESTIONS 32 to 36 DEAL WITH THE REASONS PEOPLE LIKE OR DISLIKE THEIR
JOBS AND THE DEGREE OF SPECIALIZATION THERE IS TO A SPECIFIC JOB.   IT IS
IMPORTANT TO REMEMBER THAT PEOPLE MAY LIKE OR DISLIKE A JOB FOR DIFFERENT
REASONS.   READ THE STORY FIRST AND THEN ANSWER THE QUESTIONS.   MARK YOUR
ANSWERS (WITH A.. "X") AS THOUGH YOU WERE THE PERSON IN THE STORY RATHER
THAN THE WAY YOU FEEL ABOUT THE DETAILS OF THE JOB.

Sam is a taxi driver and has worked for the same company in a large
city for seventeen years.   He is very proud of his record because
he hasn't had any traffic tickets or accidents since he was employed
with his company.   Sam droppe . out of high school at age sixteen.
He served time in the military service as an infantry man.   He has
had no formal training since high school, and taxi driving is the
only job he has ever had.   He is married and has two children.   Sam
would like to make more money so that his family could have more of
the pleasures of life, but he is earning the top amount of money
possible for a taxi driver and he is afraid to try any other job
because of his lack of education and other job experience.   Sam plans
to continue driving a cab at least until his children leave home and
are on their own.

32.   The value of earning more money as a job satisfaction factor
for Sam appears to be:

1____   High

2____   Average   •

3____   Low   .

4____   Can't say, not enough information given

33.   The actual value of driving a taxi as it appears to Sam seems to be:

1____   High

2____   Average

3____   Low

4____   Can't say, not enough information given

34.   If Sam were to quit his job and try another one, what amount of
success does it appear that he would have in maintaining the same
standard of living for his family:

1____   High

2____   Average

:____   Low

4____   Can't say, not enough information given

35. As a taxi driver, how much does it appear that Sam desires social relations with other people while he is on the job?

1____ High

2____ Average

3____ Low

4____ Can't say, not enough information given

36. Sam seems to give the importance of job security a rating of:

1____ High

2____ Average

3____ Low

4____ Can't say, not enough information given

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211 AWARENESS OF SELF CHARACTERISTICS HELP TO MAKE WISE CAREER CHOICES

YOUR UNDERSTANDING OF YOUR OWN INTERESTS AND ABILITIES WILL HELP YOU
TO MAKE CAREER PLANS MORE WISELY. EACH OF THE FOLLOWING ITEMS GIVES
YOU INFORMATION ABOUT THE ABILITIES AND INTERESTS OF A STUDENT YOUR
AGE, AND LISTS SOME POSSIBLE FUTURE OCCUPATIONS THE STUDENT MAY CONSIDER.
MANY JOBS MIGHT BE APPROPRIATE, BUT FROM THOSE LISTED YCU ARE ASKED TO
SELEC. THE OCCUPATION WHICH SEEMS BEST SUITED FOR THE PERSON DESCRIBED.
MARK ONLY ONE CHOICE FOR EACH ITEM.

37. Stan has earned high grades in mathematics but low grades in science
and art. He enjoys work that involves detail. He is the treasurer
of the school student body and plans to attend a four year college.

For which of the following jobs does Stan seem best suited?

1____ bank cashier

2____ bookkeeper

?____ accountant

4____ professor of economics

38. Edward has a strong interest and aptitude in the biological sciences,
and is weakest in foreign languages and social studies. As a waiter
during summer vacation, he found that he enjoyed working directly
with people. A member of his school debate club, he is comfortable
speaking before groups of people. Ed is precise in his work, aid
plans to attend college.

Of the following occupations, which fits best with his interests
and aptitudes?

1____ hospital orderly

2____ laborator; technician

3____ biology teacher

4____ writer of biological textbooks

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39. Anne is interested in people. She especially enjoyed a social
    studies project in which she studied the growth of social welfare
    programs in this country. Her interests are more along theoretical
    lines rather than in practical applications of knowledge. Working
    as a salesgirl during the summer, Anne didn't enjoy the constant
    public contact which the job required. She scores high on tests of
    language arts and mathematics. Anne plans to attend college and,
    money permitting, would like to pursue additional specialized
    training in graduate school.

    Which of the following occupations best matches Anne's aptitudes
    and interests?

    1____ marriage counselor

    2____ airline stewardess

    3____ probation officer

    4____ social scientist and researcher

40. Sally is interested in music, fashion, and interior design. She scores
    high on tests of creativity. She earns below average grades in most
    school subjects. She does however, earn high grades in visual arts
    and in music courses. She wants to begin working immediately after
    high school graduation. She is poised and self confident and would
    accept a job that was accompanied by a formal training program.

    For which of the following occupations does Sally seem best suited?

    1____ architect

    2____ decorator trainee, home furnishing store

    3____ high school art instructor

    4____ stock girl, home furnishings store

41. Since childhood, Jerry has been interested in transportation, and has
    also enjoyed doing things with his hands. He scores high on tests of
    mechanical ability, has excellent eye-hand coordination, and is weak
    in reading and language arts skills. After completing high school,
    he would like to attend a trade school or to find work accompanied
    by an on-the-job training program.

    Of the following occupations, which seems most consistent with Jerry's
    interests and abilities?

    1____ airplane mechanic

    2____ mechanical engineer

    3____ airport guard

    4____ director, traffic safety council

IN EACH OF THE FOLLOWING ITEMS, YOU ARE GIVEN INFORMATION ABOUT A PERSON. YOU ARE THEN GIVEN THREE OCCUPATIONAL CHOICES HE OR SHE MIGHT CONSIDER. WITH THE INFORMATION YOU HAVE, YOU ARE ASKED TO DECIDE WHETHER EACH JOB CHOICE IS LIKELY TO WORK OUT WELL FOR THAT PERSON. MARK ONLY ONE ANSWER FOR EACH ITEM.

Ralph has worked as a criminal lawyer for ten years. Recently he experienced a severe emotional shock and was unable to work for several months. His doctor now says that Ralph can begin working again on a part-time basis, and that his return to full-time work should be very gradual. He has told Ralph to try to find work with less pressure, and less emotional stress. Listed below are possible jobs which Ralph might consider during his period of recovery.

Indicate whether each seems an appropriate choice by marking an "X" in the space provided.

42. district attorney

    1___very appropriate   2___somewhat appropriate   3___very inappropriate

43. substitute law teacher

    1___very appropriate   2___somewhat appropriate   3___very inappropriate

44. part-time researcher in law office

    1___very appropriate   2___somewhat appropriate   3___very inappropriate

Robert graduated from an engineering college and enlisted in the United States Air Force. He was a squadron commander and later became a commercial airline pilot. He flew for the airlines for 15 years. During his last physical examination, it was discovered that his eyesight had weakened, and no longer meets the standards for airline pilots. He enjoys airline work, and would like to continue in some related job.

Following are some jobs Robert might consider. After each job indicate whether it seems an appropriate choice for him.

45. airline ground instructor

    1___very appropriate   2___somewhat appropriate   3___very inappropriate

46. manager of large municapal airport

    1___very appropriate   2___somewhat appropriate   3___very inappropriate

47. aeronautical engineer

    1___very appropriate   2___somewhat appropriate   3___very inappropriate

213 RELATIONSHIP BETWEEN SCHOOL SUBJECT AREAS AND OCCUPATIONS IN PREPARING AN EDUCATIONAL PLAN

IN EACH OF THE FOLLOWING PARAGRAPHS, YOU ARE GIVEN INFORMATION ABOUT A STUDENT. FROM THE INFORMATION GIVEN, SELECT THE MOST APPROPRIATE CAREER PLAN FOR EACH STUDENT BY MARKING AN "x" IN ONE OF THE SPACES PROVIDED.

48. Tom is in his senior year of high school. His school record shows much success in industrial arts subjects. His math courses have been above average. He has had trouble with reading and writing subjects. He does not feel very happy with his record in social studies and science. Tom's school record suggests that his post high school plans should include:

    1____ business college

    2____ apprenticeship

    3____ four-year college

    4____ no training

49. Mary is a high school junior. She is taking as many courses as she can in social studies and communications skills. Anthropology and sociology were her favorite subjects. After high school, she plans to follow the s e educational pattern in a four-year college. This educational plan will help her prepare for a position as a:

    1____ nurse

    2____ stewardess

    3____ clerk-typist

    4____ probation worker

50. A student is giving serious thought to studying to be either a psychologist or a college history professor. To achieve either goal, the student must complete an educational plan that will include:

    1____ communications skills and science at high school, college and post graduate levels

    2____ social studies and communications skills at high school a college levels

    3____ science and mathematics at high school and college levels

    4____ communications skills and social studies at high school, college, and post graduate levels

51. Mary is a senior. She is taking English, French, World History,
Speech, and Art. She does very well in English, especially literature.
Her French is good and she does well in Speech. With this pattern of
abilities, she should give consideration to becoming:

1____ an archeologist

2____ an accountant

3____ a newspaper reporter

4____ a social worker

52. John has outlined a course that includes many mathematics and fine
arts (art) classes. These are also his best classes. He plans two
years training beyond high school. This program will prepare him as:

1____ an artist

2____ a draftsman

3____ a teacher

4____ an architect

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221 IDENTIFYING CAREER ALTERNATIVES THAT ARE CONSISTENT WITH ABILITIES
        AND INTERESTS

IN EACH OF THE FOLLOWING PARAGRAPHS YOU ARE GIVEN INFORMATION ABOUT A
STUDENT. FROM THE INFORMATION GIVEN, YOU ARE TO SELECT THE MOST APPROPRIATE
CAREER POSSIBILITIES FOR EACH STUDENT BY PLACING AN "X" IN ONE OF THE
SPACES PROVIDED.

53. George is a high school senior who has had trouble with social studies
     and communications subjects. He has always enjoyed working with
     mechanical objects and he has performed well in shop classes. His
     hobbies have included making model cars and airplanes and tearing down
     and repairing motors. He can work most problems in general math and
     algebra but hasn't tried advanced math. His career plans might
     include such jobs as:

     1____ engineer, draftsman, and architect

     2____ orderly, porter, custodian

     3____ electronic assembler, ranch hand, stock clerk

     4____ mechanic, plumber, pattern maker

54. Linda studied her school record and interest and ability test scores.
     She found that she had excellent math and science skills, that she
     enjoyed outdoor activities and had strong interests in social service,
     science, and artistic activities. Her communication skills were not
     outstanding and she disliked sales and verbal activities. Reasonable
     career plans for Linda could include:

     1____ accountant, author, chemist

     2____ geologist, oceanographer, botanist

     3____ author, actor, teacher

     4____ librarian, clergyman, realtor

55. Fred's school record shows many C's, and few B's, and no A's or D's.
     He is slightly above average. He works better with people than with
     things or data. He likes mechanical, artistic, and computational
     activities and is good at handling details. he would be expected to
     be successful if he will explore occupations including the following:

     1____ accounting-clerk, cashier, bank teller

     2____ nurse, social worker, counselor

     3____ secretary, receptionist, salesperson

     4____ hospital orderly, porter, hotel bell captain

56.   Lisa has an excellent school record. Her greatest strengths are in
      fine arts and communications skills. Her hobbies include drawing,
      making up poems, and reading. She sings in the school chorus. Her
      other interests include helping people. From the groups of occupations
      listed below, pick the group that might be best suited for Lisa:

      1_____ art critic, writer, artist

      2_____ chemist, engineer, physician

      3_____ architect, physicist, mathematician

      4_____ designer, tool and die maker, draftsman

THE FOLLOWING QUESTIONS ARE BASED ON CONTINUING INFORMATION PRESENTED
ABOUT A STUDENT.

57.   John is a twelve year old junior high school student who says that
      he wants to be an engineer. Would you say that he would be success-
      ful as an engineer?

      1____   Likely to succeed

      2____   Might succeed

      3____   Not likely to succeed

      4____   More information needed

58.   John is now 14 and entering high school. He still maintains that
      he wants to be an engineer because he likes mechanical things and
      wants to be able to be creative, and is enrolling in mathematics
      and science courses. Would you say that he would be successful
      as an engineer?

      1____   Likely to succeed

      2____   Might succeed

      3____   Not likely to succeed

      4____   More information needed

59.   John is now 15 1/2 and in his sophomore year. His grades are always
      above average in all areas with the exception of math and science,
      where they are average. He feels that he can do better work if he
      "works harder". Would you say that he would be successful as an
      engineer?

      1____   Likely to succeed

      2____   Might succeed

      3____   Not likely to succeed

      4____   More information needed

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60.   John is now 16 1/2 and in the second semester of the junior year.
      His grade point average is well above average, but his grades in
      math and science are average to below average. On a recent aptitude
      test John scored very high in literary, verbal usage, and reading
      comprehension areas. He scored low in mechanical reasoning, spatial
      relations, mathematical computation and science. He still maintains
      that he intends to major in engineering in college. Would you say
      that he would be:

      1____   Likely to succeed

      2____   Might succeed

      3____   Not likely to succeed

      4____   More information needed

61.   John is now 17 1/2 and in his senior year of high school. He has taken
      the scholastic aptitude test and scored in the top ten percent in the
      verbal area, but in the bottom thirty percent in mathematics. He says
      that he received the high score on the verbal SAT because of his interest
      in journalism and the four years that he has spent working on the school
      paper. He has also been active in drama and debate. However, he still
      plans to major in engineering. Would you say that he would be:

      1____   Likely to succeed

      2____   Might succeed

      3____   Not likely to succeed

      4____   More information needed

62.   John is now a sophomore at the State University. He is currently
      enrolled in a liberal arts course, having switched from the school
      of engineering after his first semester. He is active on the debate
      team, campus student government organization, and now talks about
      majoring in government with a possible pre-law major and eventually
      law school. Would you say that he would be:

      1____   Likely to succeed

      2____   Might succeed

      3____   Not likely to succeed

      4____   More information needed

YOUR RESPONSES TO THE FOLLOWING QUESTIONS SHOULD BE BASED ON THE INFORMATION GIVEN IN THE PRECEDING STORY ABOUT JOHN. MARK ONLY ONE ANSWER FOR EACH QUESTION.

63. What motivated John to express an interest in engineering?

1____ His interests

2____ His values

3____ His abilities

64. With respect to his future plans, what did John fail to do?

1____ Plan his future choice of an occupation

2____ Make a decision on what he was going to do

3____ Implement his decision (do something that would lead toward his goal)

4____ Evaluate his continuing progress in relation to his expressed plans

65. What did John fail to evaluate adequately in his career planning?

1____ His interests

2____ His values

3____ His abilities

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PLACE AN "X" IN ONE OF THE SPACES PROVIDED FOR WHAT YOU THINK IS THE
MOST APPROPRIATE ANSWER TO EACH QUESTION.

66. Which occupation would probably provide a person with the highest income?

   1____ Teacher

   2____ Laboratory technician

   3____ Civil Engineer

   4____ Cook

67. Which of the following occupations would allow a person to be most
    free from the care and worry involved in supervising other workers
    on the job?

   1____ Foreman

   2____ Director of operations

   3____ Airline pilot

   4____ Teacher

68. Which of the following occupations would provide a person with the greatest
    responsibility for controlling and directing others?

   1____ Policeman

   2____ Ship's Captain

   3____ Personnel Manager

   4____ Lawyer

69. Which of the following employers would provide an employee with the
    most regular (steady) income:

   1____ Farming

   2____ Civil Service

   3____ A small business

   4____ A large manufacturing corporation

70. Which of the following occupations would provide a person with the
    most independence on the job?

   1____ Teacher

   2____ Draftsman

   3____ Farm worker

   4____ Factory production line worker

311 TRAINING PROGRAMS FOR OCCUPATIONS

What education or training is generally expected or required for each of these occupations? Mark one choice for each occupation as shown in the example.

OCCUPATION	General High School or Less	Vocational-Technical School	Apprentice-ship	Post Secondary Schooling	Four Years or More of College
EXAMPLE:					
Practical Nurse		X			
71. Waitress - Waiter	1	2	3	4	5
72. Glass Blower	1	2	3	4	5
73. Hospital Attendant	1	2	3	4	5
74. Social Worker	1	2	3	4	5
75. Air Conditioning & Refrigeration Mechanic	1	2	3	4	5
76. Blacksmith	1	2	3	4	5
77. Pharmacist	1	2	3	4	5
78. Occupational Therapy Technician	1	2	3	4	5
79. Automobile Salesman	1	2	3	4	5
80. Engineer	1	2	3	4	5

Mike told his school counselor he wants to become a heavy equipment operator. Mike and the counselor began to plan activities that will help Mike to gain employment.

In each item, mark with an "X" the strategy you think MOST APPROPRIATE for Mike.

81. Most appropriate type of training after high school

1____ On the Job Training

2____ Community College

3____ State Technical College

4____ Apprenticeship

82. Most appropriate school activity

1____ Course in Career Planning

2____ High School Work Experience Program

3____ Field Trips

4____ Personal Counseling

83. Most appropriate community activity

1____ Volunteer Work

2____ Part-time work with Municipal Engineer

3____ Job site visitations

4____ Attend community planning meetings

Sue has chosen a career in law enforcement. She plans to enter as a police officer. In each item, mark with an "X" the strategy you think MOST APPROPRIATE for Sue.

84. Most appropriate type of training after High School

1____ On the Job Training

2____ Apprenticeship Training

3____ Four years of college

4____ State Technical College

85. Most appropriate high school courses

   1____ Social Science courses

   2____ Physical Education

   3____ Practical Arts

   4____ Math and Science

86. Most appropriate School activity

   1____ Participate in student government

   2____ Career Search

   3____ Viewing films

   4____ High School Service Club Work

87. Most appropriate Community activity

   1____ Interview Police Officers

   2____ Part-time or Volunteer work at Police Department

   3____ YWCA Club work

   4____ Attend Municipal Court sessions

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321   RELATIONSHIPS AMONG OCCUPATIONAL LEVEL, MEASURED VERBAL ABILITY,
        MATH ABILITY, AND INTERESTS

For each occupation listed below there is <u>one job fact that is wrong.</u>
Find it and mark it with an "X", as shown in the example.

	OCCUPATION	Occupational level	Verbal Ability	Math Ability	Interests
EXAMPLE:					
	Mailman	___unskilled	___low	___low	_X_ ideas things
88.	Farmhand	1___skilled	2___low	3___low	4___things outdoors
89.	Television Announcer	1___semi-skilled	2___high average	3___average	4___people data
90.	Chemical Lab Technician	1___semi-skilled	2___average	3___high average	4___things
91.	Speech Teacher	1___profes-sional	2___average	3___high average	4___people ideas
92.	Registered Nurse	1___skilled	2___high average	3___average	4___people data

1. I am

   1_____ Female

   2_____ Male

2. In the last twelve months, have you been in a program of career guidance or career education?

   1_____ Yes

   2_____ No

3. In the last twelve months, have you discussed career plans with a School Guidance Counselor?

   1_____ Yes

   2_____ No

   3_____ Don't Remember

4. We want to know if you have had any experience working for money outside your home. Mark the statement below that best describes you.

   1_____ I now have a regular job that I work at at least one day or evening a week.

   2_____ I have worked during the summer or some time during the last twelve months.

   3_____ I have not worked during the last twelve months.

   4_____ I have been in a work-study program in school.

5. Have you decided on the kind of job you want to go into?

   1_____ Yes

   2_____ No

INSTRUCTION SCRIPT

(GOOD MORNING)   (GOOD AFTERNOON)

PLEASE CLEAR YOUR DESKS OF ALL MATERIALS OTHER THAN THE
BOOKLET AND THE PENCIL.

THE QUESTIONS YOU ARE ABOUT TO ANSWER ARE NOT A "TEST"
IN ANY SENSE OF THE WORD.

NO GRADES WILL BE GIVEN AND YOUR NAME WILL NOT BE PUT ON
THE BOOKLET. NO ONE IN THIS SCHOOL WILL EVER SEE YOUR
BOOKLET, OR KNOW HOW YOU DID. WE ARE ONLY INTERESTED IN
WHAT YOU THINK THE CORRECT ANSWERS ARE AND NOT IN ANYTHING
ELSE.

THE COVER PAGE OF YOUR EXERCISE BOOKLET SHOULD HAVE THE
WORDS "LEVEL_____" (A for 13's, B for 17's, select the
right one) PLEASE CHECK TO BE SURE THAT YOURS IS CORRECT.

NOW, IN THE LOWER RIGHT HAND CORNER OF THE COVER PAGE PLEASE
WRITE THIS FIVE DIGIT NUMBER: . (read appropriate
number and hold up card). NOW WRITE THE NUMBER (1, 2, 3, 4,
5, or 6 - Administration no.) AT THE END OF THE 5 DIGIT
NUMBER YOU JUST WROTE. EVERYONE SHOULD NOW HAVE SIX NUMBERS
ON THE COVER OF THEIR BOOKLET.

                (pause to be sure that everyone does)

THE PURPOSE OF THIS TEST IS TO LEARN HOW MUCH STUDENTS
KNOW ABOUT CHOOSING AND PLANNING FOR A CAREER. THE RESULTS
OF THE TEST WILL BE USED TO HELP ESTABLISH CAREER DEVELOP-
MENT PROGRAMS IN CONNECTICUT SCHOOLS. THE RESULTS WILL
NOT BE USED TO EVALUATE YOU OR YOUR SCHOOL.

YOU WILL HAVE APPROXIMATELY ONE PERIOD TO COMPLETE THE
TEST. SOME OF YOU WILL FINISH, SOME MAY NOT - BUT PLEASE
DO AS WELL AS YOU CAN.

READ THE DIRECTIONS FOR EACH ITEM CAREFULLY. IF YOU NEED
HELP, RAISE YOUR HAND AND I WILL COME TO YOU.

NOW, OPEN YOUR BOOKLETS AND BEGIN.

As you read this last sentence, set your timer for 50 minutes.
When the timer goes off, read the following aloud. (Be sure
to select the script for the proper age.)

For 17 year olds:

NOW PLEASE STOP. TURN TO THE LAST PRINTED PAGE IN YOUR
TEST BOOKLET, AND ANSWER THE QUESTIONS THERE. WHEN YOU
ARE FINISHED WITH THOSE, YOU MAY LEAVE. PLEASE TURN IN
YOUR TEST BOOKLET AND YOUR PENCIL TO ME AS YOU GO.

THANK YOU.

For 13 year olds:

NOW PLEASE STOP. TURN TO THE LAST PRINTED PAGE IN YOUR
TEST BOOKLET. RIGHT NOW, AT THE BOTTOM OF THE PAGE, PLEASE
WRITE AN M IF YOU ARE MALE, OR AN F IF YOU ARE FEMALE, AND
DRAW A CIRCLE AROUND IT. NOW ANSWER THE QUESTIONS; WHEN
YOU ARE FINISHED, YOU MAY LEAVE. PLEASE TURN IN YOUR TEST
BOOKLET AND YOUR PENCIL TO ME AS YOU GO.

THANK YOU.

STATE OF CONNECTICUT
STATE DEPARTMENT OF EDUCATION
Box 2219 — Hartford. Connecticut 06115

TEL. 566-

Dear Superintendents:

As you know, the State Board of Education is conducting an educational
assessment program in Connecticut. As a continuing step in that program,
the Board has retained the Institute for the Study of Inquiring Systems
in Philadelphia to administer a career guidance assessment package in
approximately 100 randomly selected schools throughout our state. Although
the tests will be given to individual students, the results will not be
identifiable by student, school or district. Data obtained will give both
an overview of the career guidance status of all 13 and 17 year old students
and information about them classified according to the size of their commu-
nities. The procedures will be consistent with the methods used by the
National Assessment of Educational Progress. The sampling procedure will
involve no more than 45 students in any given school. All materials for
the testing will be supplied by the Institute for the Study of Inquiring
Systems.

The school(s) sampled will be asked to supply one room seating 15 students.
A listing of the age group involved in the sample attending the school(s)
will need to be prepared using forms supplied. The enclosed materials explain
exactly how the program works and the nature of the cooperation expected.

Copies of this letter will be sent to the principal(s) of the school(s) in
your district selected in the sample.

Your participation in this very important project is most essential to the
continued improvement of Connecticut education.

Sincerely yours,

MAURICE J. ROSS
Acting Commissioner of Education

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ISIS

INSTITUTE FOR THE STUDY OF INQUIRING SYSTEMS

3508 MARKET STREET   PHILADELPHIA, PA. 19104   (215) 386-2186

MEMO TO SCHOOL PRINCIPALS

During the months of May and June, 1974, we will conduct a career guidance assessment of 13-year-old and 17 year-old students in selected schools throughout the State. We plan to meet with you in May at which time we will discuss the details of our assessment, including schedules, number of students to be assessed, and the length of time we will be in your school.

All selected students will be assessed in their own school, in groups of 12-15 at a time. Each selected student will be assessed only once for approximately one hour. The identity of the selected students, as well as that of the school and school district, is confidential and will not be revealed in any of the assessment reports.

Your school has been selected by a random sampling procedure from all public schools throughout Connecticut. Our activities in all the schools selected will have as their objectives, the random selection of students for assessment, and the administration of exercises to those selected students. We have defined field procedures to meet these objectives which we hope will cause minimal interference with your routines.

Listed below are several tasks which are necessary if the program is to be successful. Your cooperation and assistance are appreciated.

1. Based on the experience of National Assessment, our activities in your school will require a coordinator. This role may be filled by you or your representative. The coordinator should attend the introductory meeting with you or represent you at that meeting. The coordinator's functions are to:

    a. provide access to the information necessary for us to prepare necessary enrollment data for eligible students (see 2. below);

    b. alert teachers and students to the arrival of the assessment staff;

    c. aid in the assessment by preparing a schedule and assuring that students are present for their assessment.

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2. In order for us to select a random sample of eligible students it will
   be necessary at our first meeting in May for our administrator to have
   access to your student rosters. Working with the rosters, the admini-
   strator will prepare lists from which we will select the students to
   be tested. Students selected will not be notified until the day of
   their assessment.

3. A suitable space will be required for the assessment. Our administra-
   tor will discuss this need with you in May. In general, we will require
   a room with 15 student desks or stations, comfortably spaced, and a
   desk for the administrator.

ISIS

INSTITUTE FOR THE STUDY OF INQUIRING SYSTEMS

3508 MARKET STREET   PHILADELPHIA, PA., 19104   (215) 386-2186

We are writing to request your cooperation in a continuing effort to assess
the educational programs of Connecticut Public Schools. We have been retained
by the State Department of Education to conduct the latest step in that program -
an assessment of the career planning and decision making skills of 13 and 17
year old students in Connecticut Public Schools.

The objective of this assessment is to garner information about the career
planning and decision making status of Connecticut students. To that end,
the Board of Education has developed exercises based on the career guidance
objectives of the State.

Your school is one of approximately 100 schools randomly selected to take part
in the study. The data collected will be reported only in broad categories, and
will in no way identify individual students, schools, or school districts. The
assessment will be conducted by our own staff; none of your personnel will be
asked to administer the exercises.

Enclosed is additional information about the program including an introductory
letter from Acting Commissioner Ross, a memo detailing our schedule, the
in-school activities of our field personnel, and a description of several tasks
whose completion is necessary if we are to be successful in the assessment
program. The superintendent of your district has received similar information
about the program.

We are looking forward to your support of the program and to visiting your
school.

Sincerely,

George A. Kaufmann
Project Manager   306

STATE OF CONNECTICUT
STATE DEPARTMENT OF EDUCATION
Box 2219 — Hartford. Connecticut 06115

TEL. 566-

Dear Superintendents:

As you know, the State Board of Education is conducting an educational assessment program in Connecticut. As a continuing step in that program, the Board has retained the Institute for the Study of Inquiring Systems in Philadelphia to administer a career guidance assessment package in approximately 100 randomly selected schools throughout our state. Although the tests will be given to individual students, the results will not be identifiable by student, school or district. Data obtained will give both an overview of the career guidance status of all 13 and 17 year old students and information about them classified according to the size of their communities. The procedures will be consistent with the methods used by the National Assessment of Educational Progress. The sampling procedure will involve no more than 45 students in any given school. All materials for the testing will be supplied by the Institute for the Study of Inquiring Systems.

The school(s) sampled will be asked to supply one room seating 15 students. A listing of the age group involved in the sample attending the school(s) will need to be prepared using forms supplied. The enclosed materials explain exactly how the program works and the nature of the cooperation expected.

Copies of this letter will be sent to the principal(s) of the school(s) in your district selected in the sample.

Your participation in this very important project is most essential to the continued improvement of Connecticut education.

Sincerely yours,

MAURICE J. ROSS
Acting Commissioner of Education

ISIS

INSTITUTE FOR THE STUDY OF INQUIRING SYSTEMS

3508 MARKET STREET   PHILADELPHIA, PA. 19104   (215) 386-2186

MEMO TO SCHOOL PRINCIPALS

During the months of May and June, 1974, we will conduct a career guidance assessment of 13-year-old and 17-year-old students in selected schools throughout the State. We plan to meet with you in May at which time we will discuss the details of our assessment, including schedules, number of students to be assessed, and the length of time we will be in your school.

All selected students will be assessed in their own school, in groups of 12-15 at a time. Each selected student will be assessed only once for approximately one hour. The identity of the selected students, as well as that of the school and school district, is confidential and will not be revealed in any of the assessment reports.

Your school has been selected by a random sampling procedure from all public schools throughout Connecticut. Our activities in all the schools selected will have as their objectives, the random selection of students for assessment, and the administration of exercises to those selected students. We have defined field procedures to meet these objectives which we hope will cause minimal interference with your routines.

Listed below are several tasks which are necessary if the program is to be successful. Your cooperation and assistance are appreciated.

1. Based on the experience of National Assessment, our activities in your school will require a coordinator. This role may be filled by you or your representative. The coordinator should attend the introductory meeting with you or represent you at that meeting. The coordinator's functions are to:

   a. provide access to the information necessary for us to prepare necessary enrollment data for eligible students (see 2. below);

   b. alert teachers and students to the arrival of the assessment staff;

   c. aid in the assessment by preparing a schedule and assuring that students are present for their assessment.

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2. In order for us to select a random sample of eligible students it will
   be necessary at our first meeting in May for our administrator to have
   access to your student rosters. Working with the rosters, the admini-
   strator will prepare lists from which we will select the students to
   be tested. Students selected will not be notified until the day of
   their assessment.

3. A suitable space will be required for the assessment. Our administra-
   tor will discuss this need with you in May. In general, we will require
   a room with 15 student desks or stations, comfortably spaced, and a
   desk for the administrator.

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(Transfer form)

APPENDIX E

BASIC DATA

CONTENTS

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TABLE E.0.1

CONTENT DOMAIN AVERAGE PERFORMANCE
BY
AGE AND SEX

Content Domain		13 Year Olds		17 Year Olds	
No.	Short Name	Female	Male	Female	Male
114	Job Satisfaction	59.4	59.6	66.6	65.2
115	Levels, Fields, Emphasis	48.6	45.3	57.7	54.4
116	Occupational Trends	50.9	51.4	41.6	43.1
117	Levels and Education	36.0	35.7	41.5	42.7
118	Leisure Time	53.7	55.7	56.4	60.1
119	Specialization/Satisfaction	42.9	40.4	51.1	48.1
211	Self Awareness	69.3	65.4	73.9	72.4
212	Life Experiences	62.1	60.1	47.0	48.3
213	School Subject Areas	56.7	55.4	62.4	57.6
221	Abilities and Interests	40.5	40.3	67.9	66.8
222	Steps in Planning	22.5	21.6	58.5	55.0
224	Satisfaction from Work	51.5	47.7	35.0	34.3
311	Training Programs	31.7	31.8	44.8	43.9
312	Related Activities	28.2	26.5	44.9	43.7
321	Level/Abilities/Interests	33.5	34.7	46.2	46.6

TABLE E.0.2

CONTENT DOMAIN AVERAGE PERFORMANCE
BY
SIZE OF COMMUNITY
(13 year olds)

| Content Domain | | | Size of Community | | | |
No.	Short Name	Conn.	Big City	Fringe City	Medium City	Smaller Place
114	Job Satisfaction	59.5	55.0	61.4	60.4	60.5
115	Levels, Fields, Emphasis	46.9	45.0	49.0	44.9	48.3
116	Occupational Trends	51.1	49.0	50.2	49.6	54.6
117	Levels and Education	35.8	33.2	37.2	36.0	36.5
118	Leisure Time	54.6	53.5	55.3	54.7	54.7
119	Specialization/Satisfaction	41.6	37.1	43.4	42.7	42.6
211	Self Awareness	67.4	58.4	70.3	68.8	70.1
212	Life Experiences	61.1	54.3	63.6	62.8	62.5
213	School Subject Areas	56.1	42.6	62.6	56.6	59.9
221	Abilities and Interests	40.4	35.1	41.3	42.0	42.2
222	Steps in Planning	22.0	16.0	23.6	23.2	23.9
224	Satisfaction from Work	49.6	38.9	53.4	50.6	53.2
311	Training Programs	31.7	27.5	33.2	32.5	32.8
312	Related Activities	27.4	23.2	29.9	27.5	28.2
321	Level/Abilities/Interests	34.0	26.1	38.1	34.0	36.4

TABLE E.0.3

CONTENT DOMAIN AVERAGE PERFORMANCE
BY
SIZE OF COMMUNITY
(17 year olds)

| Content Domain | | | Size of Community | | | |
No.	Short Name	Conn.	Big City	Fringe City	Medium City	Smaller Place
114	Job Satisfaction	65.9	61.2	66.1	67.5	67.7
115	Levels, Fields, Emphasis	56.1	48.8	60.5	56.5	57.0
116	Occupational Trends	42.4	40.2	43.6	41.8	43.2
117	Levels and Education	42.1	40.7	45.5	41.8	40.2
118	Leisure Time	58.2	57.4	60.5	58.1	56.8
119	Specialization/Satisfaction	49.7	43.9	52.7	49.4	51.4
211	Self Awareness	73.2	67.6	77.4	72.6	73.8
212	Life Experiences	47.6	43.9	50.3	49.0	46.7
213	School Subject Areas	60.1	53.5	64.5	59.4	61.4
221	Abilities and Interests	67.4	62.3	69.5	67.1	69.2
222	Steps in Planning	56.8	50.0	60.0	57.2	58.2
224	Satisfaction from Work	34.7	32.7	37.6	33.5	34.5
311	Training Programs	44.4	41.8	46.6	44.0	44.5
312	Related Activities	44.2	38.6	47.6	44.7	44.9
321	Level/Abilities/Interests	46.3	38.3	49.3	47.4	46.3

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TABLE E.O.4

CONTENT DOMAIN AVERAGE PERFORMANCE
BY
CAREER PLANNING AND EXPERIENCE
(13 year olds)

No.	Content Domain Short Name	Conn.	Career Guidance or Education		Counselor Discussions			Planning Voc-Tech School			Job Decision	
			Yes	No	Yes	No	?	Yes	No	?	Yes	No
114	Job Satisfaction	59.5	59.1	59.7	59.7	59.9	57.3	57.6	60.8	58.6	59.8	59.2
115	Levels, Fields, Emphasis	46.9	46.5	47.2	46.7	47.2	46.5	43.8	47.0	48.1	46.9	47.1
116	Occupational Trends	51.1	50.5	51.3	51.0	51.5	48.9	49.2	52.0	50.9	50.8	51.8
117	Levels and Education	35.8	35.3	35.9	36.5	36.2	31.4	34.4	36.4	35.7	35.6	36.1
118	Leisure Time	54.6	53.2	54.8	53.3	54.9	53.9	54.3	54.8	53.8	54.8	53.6
119	Specialization/Satisfaction	41.6	40.9	42.0	42.4	42.3	36.5	37.9	43.8	39.9	41.5	42.0
211	Self Awareness	67.4	63.5	68.6	67.1	68.5	60.4	62.7	68.7	67.0	66.9	68.2
212	Life Experiences	61.1	59.7	61.7	61.9	61.8	55.2	58.6	62.2	60.5	60.5	62.6
213	School Subject Areas	56..	52.7	57.2	56.3	58.0	43.6	47.8	59.7	54.0	55.6	57.3
221	Abilities and Interests	40.4	38.3	41.1	40.2	41.6	33.3	39.3	40.7	40.4	40.2	40.7
222	Steps in Planning	22.0	21.2	22.4	22.8	22.7	15.8	17.7	23.5	21.3	21.6	22.9
224	Satisfaction from Work	49.6	44.7	51.2	49.9	51.0	40.5	41.6	52.2	49.3	49.3	50.5
311	Training Programs	31.7	30.5	32.3	31.7	32.6	27.4	30.4	33.1	30.4	31.9	31.7
312	Related Activities	27.4	25.5	28.2	26.4	28.5	24.1	24.6	29.1	26.4	27.5	27.3
321	Level/Abilities/Interests	34.0	31.3	35.3	35.2	35.0	27.3	30.3	36.3	33.1	33.7	35.3

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CONTENT DOMAIN AVERAGE PERFORMANCE
BY
CAREER PLANNING AND EXPERIENCE
(17 year olds)

Content Domain No.	Short Name	Conn.	Career Guidance or Education		Counselor Discussions			Work Experience*				Job Decision	
			Yes	No	Yes	No	?	A	B	C	D	Yes	No
114	Job Satisfaction	65.9	64.8	66.4	67.2	64.2	61.3	66.7	65.5	64.8	67.2	65.9	66.0
115	Levels, Fields, Emphasis	56.1	53.6	57.3	57.4	54.5	50.3	58.4	55.3	53.3	50.1	56.1	56.3
116	Occupational Trends	42.4	41.5	42.7	42.8	41.9	39.7	42.6	42.3	42.8	40.9	42.4	42.3
117	Levels and Education	42.1	40.8	42.6	42.4	42.4	37.5	42.3	42.0	42.0	42.3	41.7	42.7
118	Leisure Time	58.2	58.2	58.2	58.3	58.2	57.3	59.2	58.0	56.8	56.0	57.4	59.7
119	Specialization/Satisfaction	49.7	47.8	50.5	51.6	47.2	42.1	51.1	49.2	48.3	46.4	49.3	50.4
211	Self Awareness	73.2	71.6	73.9	75.7	69.9	63.1	75.4	72.6	71.0	67.8	73.0	73.7
212	Life Experiences	47.6	46.9	47.9	48.0	47.5	45.6	48.2	47.0	48.4	47.1	47.4	48.1
213	School Subject Areas	60.1	57.0	61.3	62.6	56.3	51.1	62.0	58.8	60.1	54.2	60.0	60.2
221	Abilities and Interests	67.4	65.1	68.2	69.6	64.5	57.2	69.3	66.5	65.6	64.7	66.9	68.2
222	Steps in Planning	56.8	54.1	57.9	59.2	53.7	45.8	58.9	55.3	56.7	53.9	56.3	57.7
224	Satisfaction from Work	34.7	32.3	35.6	35.7	33.2	30.4	36.5	33.8	32.6	31.2	34.1	35.8
311	Training Programs	44.4	43.4	44.8	45.4	43.4	38.9	45.8	43.6	42.5	45.1	44.5	44.3
312	Related Activities	44.2	43.1	44.8	45.9	42.4	36.7	45.5	43.4	43.5	43.7	44.5	44.1
321	Level/Abilities/Interests	46.3	43.7	47.5	47.9	45.4	35.9	48.4	45.6	43.8	44.0	46.5	46.2

*Work Experience: A = Regular Job; B = Summer Job; C = Not Worked; D = Work Study

TABLE E.1.01 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 114 -- JOB SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		1	2	3	4	5
CONNECTICUT	59.5	25.5	51.8	64.0	85.5	69.9
SEX						
Female	59.4	25.5	48.2	65.4	88.2	69.7
Male	59.6	25.2	55.6	62.7	84.8	69.9
SIZE OF COMMUNITY						
Big City	55.0	19.5	42.0	56.9	86.1	70.6
Fringe City	61.4	30.1	55.8	65.9	86.3	68.8
Medium City	60.4	26.0	53.8	63.3	86.6	72.4
Smaller Place	60.5	25.5	53.9	68.1	87.0	68.0
CAREER GUIDANCE OR EDUCATION						
Yes	59.1	22.8	51.0	63.7	88.5	69.4
No	59.7	26.4	52.0	64.5	86.1	69.7
COUNSELOR DISCUSSIONS						
Yes	59.7	23.3	50.0	66.8	86.4	71.3
No	59.9	26.4	53.5	63.8	87.1	68.9
Don't Remember	57.3	26.2	47.0	59.4	84.1	69.7
PLANNING VOC-TECH SCHOOL						
Yes	57.6	19.2	47.6	62.7	87.5	70.6
No	60.8	28.2	55.8	63.7	86.8	69.6
Undecided	58.6	24.7	47.6	64.7	86.1	69.7
JOB DECISION						
Yes	59.8	25.3	51.7	65.2	86.4	70.5
No	59.2	25.9	52.4	62.4	86.9	68.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.02 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 114 -- JOB SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		1	2	3	4	5
CONNECTICUT	0.5	0.9	1.1	1.0	0.7	1.0
SEX						
Female	0.6	1.3	1.5	1.4	1.0	1.4
Male	0.7	1.3	1.5	1.5	1.1	1.4
SIZE OF COMMUNITY						
Big City	1.0	1.8	2.3	2.3	1.6	2.1
Fringe City	0.9	2.0	2.1	2.0	1.5	2.0
Medium City	0.9	1.8	2.1	2.0	1.4	1.9
Smaller Place	0.8	1.7	1.9	1.8	1.3	1.8
CAREER GUIDANCE OR EDUCATION						
Yes	1.0	1.9	2.2	2.1	1.4	2.1
No	0.5	1.1	1.2	1.2	0.8	1.1
COUNSELOR DISCUSSIONS						
Yes	0.9	1.7	2.0	1.9	1.4	1.8
No	0.6	1.2	1.3	1.3	0.9	1.2
Don't Remember	1.5	3.0	3.4	3.4	2.5	3.2
PLANNING VOC-TECH SCHOOL						
Yes	1.3	2.3	2.9	2.8	1.9	2.6
No	0.6	1.3	1.5	1.4	1.0	1.4
Undecided	0.8	1.6	1.8	1.7	1.3	1.7
JOB DECISION						
Yes	0.6	1.2	1.3	1.3	0.9	1.2
No	0.8	1.5	1.8	1.7	1.2	1.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.03 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 115 -- LEVELS, FIELDS, EMPHASIS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		6	7	8	9	10
CONNECTICUT	46.9	41.8	52.0	60.5	32.6	47.7
SEX						
Female	48.6	43.3	52.4	64.5	33.3	49.4
Male	45.3	40.2	51.5	56.6	32.0	46.0
SIZE OF COMMUNITY						
Big City	45.0	40.7	48.9	60.0	31.3	44.1
Fringe City	49.0	43.9	53.4	63.0	34.0	50.7
Medium City	44.9	39.6	50.3	57.5	29.7	47.3
Smaller Place	48.3	42.7	54.4	61.5	34.8	48.2
CAREER GUIDANCE OR EDUCATION						
Yes	46.5	40.7	51.2	57.1	33.8	49.8
No	47.2	42.2	52.5	61.3	32.3	47.6
COUNSELOR DISCUSSIONS						
Yes	46.7	39.3	52.1	60.9	32.3	48.7
No	47.2	42.4	52.4	60.9	32.6	47.5
Don't Remember	46.5	44.5	52.3	56.1	32.3	47.3
PLANNING VOC-TECH SCHOOL						
Yes	43.8	38.5	53.9	54.6	26.7	45.1
No	47.0	41.6	50.6	61.2	33.2	48.2
Undecided	48.1	42.8	53.7	61.7	33.7	48.6
JOB DECISION						
Yes	46.9	42.3	53.1	58.3	32.3	48.3
No	47.1	40.8	50.9	63.8	32.7	47.3

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.04 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 115 -- LEVELS, FIELDS. EMPHASIS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		6	7	8	9	10
CONNECTICUT	0.5	1.0	1.1	1.0	1.0	1.0
SEX						
Female	0.7	1.5	1.5	1.4	1.4	1.5
Male	0.7	1.5	1.5	1.5	1.4	1.5
SIZE OF COMMUNITY						
Big City	1.0	2.2	2.3	2.2	2.1	2.3
Fringe City	1.0	2.1	2.1	2.1	2.0	2.1
Medium City	0.9	2.0	2.1	2.1	1.9	2.1
Smaller Place	0.9	1.9	1.9	1.9	1.8	1.9
CAREER GUIDANCE OR EDUCATION						
Yes	1.0	2.2	2.2	2.2	2.1	2.2
No	0.5	1.2	1.2	1.2	1.1	1.2
COUNSELOR DISCUSSIONS						
Yes	0.9	2.0	2.0	2.0	1.9	2.?
No	0.6	1.3	1.3	1.3	1.3	1.3
Don't Remember	1.5	3.4	3.4	3.4	3.2	3.4
PLANNING VOC-TECH SCHOOL						
Yes	1.3	2.8	2.9	2.9	2.5	2.9
No	0.7	1.5	1.5	1.5	1.4	1.5
Undecided	0.8	1.8	1.8	1.8	1.7	1.8
JOB DECISION						
Yes	0.6	1.3	1.3	1.3	1.2	1.3
No	0.8	1.7	1.8	1.7	1.7	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.05 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 116 -- OCCUPATIONAL TRENDS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		11	12	13	14	15
CONNECTICUT	51.1	52.8	32.5	49.7	65.3	55.3
SEX						
Female	50.9	56.3	33.5	49.8	63.1	51.6
Male	51.4	49.2	31.4	49.3	67.8	59.2
SIZE OF COMMUNITY						
Big City	49.0	51.1	30.0	50.5	58.4	55.0
Fringe City	50.2	54.4	31.3	48.3	65.1	52.1
Medium City	49.6	50.5	31.8	48.8	63.3	53.5
Smaller Place	54.6	54.8	35.8	50.9	72.	59.6
CAREER GUIDANCE OR EDUCATION						
Yes	50.5	52.2	30.4	49.7	63.7	56.6
No	51.3	53.1	33.0	49.7	65.8	54.8
COUNSELOR DISCUSSIONS						
Yes	51.0	51.4	31.1	53.0	64.3	55.4
No	51.5	53.8	33.6	47.7	66.6	55.7
Don't Remember	48.9	50.8	28.6	52.1	60.4	52.8
PLANNING VOC-TECH SCHOOL						
Yes	49.2	46.8	29.1	51.0	64.5	54.5
No	52.0	54.1	34.4	50.2	65.4	56.1
Undecided	50.9	54.4	31.3	49.0	65.6	54.3
JOB DECISION						
Yes	50.8	51.3	31.8	49.2	65.4	56.2
No	51.8	55.6	33.9	50.1	65.7	53.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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TABLE E.1.06 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 116 -- OCCUPATIONAL TRENDS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		11	12	13	14	15
CONNECTICUT	0.5	1.0	1.0	1.1	1.0	1.0
SEX						
Female	0.7	1.5	1.4	1.5	1.4	1.5
Male	0.7	1.5	1.4	1.5	1.4	1.5
SIZE OF COMMUNITY						
Big City	1.0	2.3	2.1	2.3	2.3	2.3
Fringe City	1.0	2.1	2.0	2.1	2.0	2.1
Medium City	0.9	2.1	1.9	2.1	2.0	2.1
Smaller Place	0.9	1.9	1.9	1.9	1.7	1.9
CAREER GUIDANCE OR EDUCATION						
Yes	1.0	2.2	2.1	2.2	2.1	2.2
No	0.5	1.2	1.1	1.2	1.1	1.2
COUNSELOR DISCUSSIONS						
Yes	0.9	2.0	1.9	2.0	1.9	2.0
No	0.6	1.3	1.3	1.3	1.3	1.3
Don't Remember	1.5	3.4	3.1	3.4	3.4	3.4
PLANNING VOC-TECH SCHOOL						
Yes	1.3	2.9	2.6	2.9	2.8	2.9
No	0.7	1.5	1.4	1.5	1.4	1.5
Undecided	0.8	1.8	1.7	1.8	1.7	1.8
JOB DECISION						
Yes	0.6	1.3	1.2	1.3	1.3	1.3
No	0.8	1.8	1.7	1.8	1.7	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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TABLE E.1.07 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 117 -- LEVELS AND EDUCATION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)					
		16	17	18	19	20	21
CONNECTICUT	35.8	19.8	58.5	20.7	70.6	24.4	21.3
SEX							
Female	36.0	17.2	61.1	21.4	71.0	19.9	25.4
Male	35.7	22.1	56.0	20.0	70.1	29.2	17.1
SIZE OF COMMUNITY							
Big City	33.2	18.7	54.9	18.5	62.1	22.0	23.1
Fringe City	37.2	20.8	59.4	21.4	75.2	25.8	20.4
Medium City	36.0	17.7	58.7	20.2	70.4	27.0	22.3
Smaller Place	36.5	20.8	60.1	22.0	73.2	22.8	20.0
CAREER GUIDANCE OR EDUCATION							
Yes	35.3	23.3	55.7	20.0	67.8	26.0	19.3
No	35.9	18.3	59.2	21.1	71.4	24.1	21.5
COUNSELOR DISCUSSIONS							
Yes	36.5	23.0	58.	20.6	69.6	24.?	22.2
No	36.2	17.9	60.3	21.5	72.0	25.2	20.4
Don't Remember	31.4	20.9	47.1	17.1	64.4	18.3	20.9
PLANNING VOC-TECH SCHOOL							
Yes	34.4	20.3	55.1	23.6	62.4	24.2	20.7
No	36.4	20.7	58.4	22.0	71.0	26.6	19.8
Undecided	35.7	17.8	60.2	18.3	73.0	21.6	23.4
JOB DECISION							
Yes	35.6	19.8	58.2	21.9	70.0	24.7	19.1
No	36.1	19.3	59.2	18.6	71.5	24.3	23.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.08 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 117 -- LEVELS AND EDUCATION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)					
		16	17	18	19	20	21
CONNECTICUT	0.4	0.8	1.0	0.9	1.0	0.9	0.9
SEX							
Female	0.6	1.1	1.4	1.2	1.3	1.2	1.3
Male	0.8	1.2	1.5	1.2	1.4	1.4	1.1
SIZE OF COMMUNITY							
Big City	0.9	1.8	2.3	1.8	2.2	1.9	1.9
Fringe City	0.8	1.7	2.1	1.8	1.8	1.9	1.7
Medium City	0.8	1.6	2.1	1.7	1.9	1.9	1.7
Smaller Place	0.8	1.6	1.9	1.6	1.7	1.6	1.5
CAREER GUIDANCE OR EDUCATION							
Yes	0.9	1.9	2.2	1.8	2.1	2.0	1.8
No	0.5	0.9	1.2	1.0	1.1	1.0	1.0
COUNSELOR DISCUSSIONS							
Yes	0.8	1.7	2.0	1.6	1.9	1.7	1.7
No	0.5	1.0	1.3	1.1	1.2	1.2	1.1
Don't Remember	1.3	2.8	3.4	2.6	3.3	2.7	2.8
PLANNING VOC-TECH SCHOOL							
Yes	1.1	2.3	2.9	2.4	2.8	2.5	2.3
No	0.6	1.2	1.5	1.2	1.4	1.3	1.2
Undecided	0.7	1.4	1.8	1.4	1.6	1.5	1.5
JOB DECISION							
Yes	0.5	1.1	1.3	1.1	1.2	1.1	1.0
No	0.7	1.4	1.7	1.4	1.6	1.5	1.5

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.09 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 118 -- LEISURE TIME
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		22	23	24	25	26
CONNECTICUT	54.6	69.9	50.0	50.4	56.6	46.0
SEX						
Female	53.7	69.0	47.6	49.1	56.2	46.6
Male	55.7	71.1	52.9	52.0	56.8	45.5
SIZE OF COMMUNITY						
Big City	53.5	66.8	54.7	45.1	53.8	47.3
Fringe City	55.3	73.0	47.1	55.0	55.9	45.4
Medium City	54.7	70.3	50.6	49.7	58.0	44.9
Smaller Place	54.7	69.4	48.4	51.2	57.9	46.5
CAREER GUIDANCE OR EDUCATION						
Yes	53.2	68.9	49.6	49.3	54.3	43.9
No	54.8	70.5	49.9	50.2	57.0	46.3
COUNSELOR DISCUSSIONS						
Yes	53.3	66.7	48.8	49.9	55.5	45.4
No	54.9	71.7	49.0	50.7	57.7	45.5
Don't Remember	53.9	68.3	57.4	46.7	50.8	46.5
PLANNING VOC-TECH SCHOOL						
Yes	54.3	72.8	54.3	47.9	54.9	41.8
No	54.8	69.2	48.0	52.4	58.4	46.0
Undecided	53.8	70.6	50.3	47.2	54.2	46.7
JOB DECISION						
Yes	54.8	69.8	50.5	50.9	57.0	45.9
No	53.6	70.1	48.5	49.1	55.6	44.9

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.10 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 118 -- LEISURE TIME
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		22	23	24	25	26
CONNECTICUT	0.5	1.0	1.1	1.1	1.0	1.0
SEX						
Female	0.7	1.4	1.5	1.5	1.5	1.5
Male	0.7	1.4	1.5	1.5	1.5	1.5
SIZE OF COMMUNITY						
Big City	1.0	2.2	2.3	2.3	2.3	2.3
Fringe City	1.0	1.9	2.1	2.1	2.1	2.1
Medium City	0.9	1.9	2.1	2.1	2.1	2.1
Smaller Place	0.9	1.8	1.9	1.9	1.9	1.9
CAREER GUIDANCE OR EDUCATION						
Yes	1.0	2.1	2.2	2.2	2.2	2.2
No	0.5	1.1	1.2	1.2	1.2	1.2
COUNSELOR DISCUSSIONS						
Yes	0.9	1.9	2.0	2.0	2.0	2.0
No	0.6	1.2	1.3	1.3	1.3	1.3
Don't Remember	1.5	3.2	3.4	3.4	3.4	3.4
PLANNING VOC-TECH SCHOOL						
Yes	1.3	2.6	2.9	2.9	2.9	2.8
No	0.7	1.4	1.5	1.5	1.5	1.5
Undecided	0.8	1.7	1.8	1.8	1.8	1.8
JOB DECISION						
Yes	0.6	1.2	1.3	1.3	1.3	1.3
No	0.8	1.6	1.8	1.8	1.8	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.11 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 119 -- SPECIALIZATION/SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX O)				
		27	28	29	30	31
CONNECTICUT	41.6	21.0	32.9	70.5	36.9	46.9
SEX						
Female	42.9	19.0	35.6	73.5	39.1	47.3
Male	40.4	23.0	30.3	67.4	34.6	46.5
SIZE OF COMMUNITY						
Big City	37.1	22.0	36.1	60.2	31.1	36.2
Fringe City	43.4	21.9	31.9	73.5	40.2	49.7
Medium City	42.7	20.7	31.5	70.5	39.1	51.5
Smaller Place	42.6	19.9	32.7	75.3	36.5	48.4
CAREER GUIDANCE OR EDUCATION						
Yes	40.9	23.6	36.1	68.1	33.4	43.1
No	42.0	20.4	32.2	71.4	37.7	48.3
COUNSELOR DISCUSSIONS						
Yes	42.4	22.0	34.1	72.4	36.0	47.5
No	42.3	20.2	32.7	71.9	37.9	48.6
Don't Remember	36.5	24.4	31.6	57.9	32.8	35.7
PLANNING VOC-TECH SCHOOL						
Yes	37.9	22.3	40.8	62.3	24.8	39.3
No	43.8	22.3	32.5	72.9	39.8	51.4
Undecided	39.9	18.3	30.0	70.2	37.1	44.0
JOB DECISION						
Yes	41.5	21.1	34.6	70.8	34.9	46.2
No	42.0	20.9	30.3	70.3	40.3	48.3

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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TABLE E.1.12 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 119 -- SPECIALIZATION/SATISFACTION
(IN PERCENT)

MOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		27	28	29	30	31
CONNECTICUT	0.5	0.9	1.0	1.0	1.0	1.0
SEX						
Female	0.7	1.2	1.4	1.3	1.4	1.5
Male	0.7	1.3	1.4	1.4	1.4	1.5
SIZE OF COMMUNITY						
Big City	1.0	1.9	2.2	2.2	2.1	2.2
Fringe City	0.9	1.8	2.0	1.9	2.1	2.1
Medium City	0.9	1.7	1.9	1.9	2.0	2.1
Smaller Place	0.9	1.5	1.8	1.7	1.9	1.9
CAREER GUIDANCE OR EDUCATION						
Yes	1.0	1.9	2.1	2.1	2.1	2.2
No	0.5	1.0	1.1	1.1	1.2	1.2
COUNSELOR DISCUSSIONS						
Yes	0.9	1.7	1.9	1.8	1.9	2.0
No	0.6	1.1	1.3	1.2	1.3	1.3
Don't Remember	1.5	2.9	3.2	3.4	3.2	3.3
PLANNING VOC-TECH SCHOOL						
Yes	1.2	2.4	2.8	2.8	2.5	2.8
No	0.7	1.2	1.4	1.3	1.5	1.5
Undecided	0.8	1.4	1.7	1.7	1.8	1.8
JOB DECISION						
Yes	0.6	1.1	1.3	1.2	1.3	1.3
No	0.8	1.4	1.6	1.6	1.7	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.13 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 211 -- SELF AWARENESS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		32	33	34	35	36
CONNECTICUT	67.4	23.8	87.2	76.2	63.9	85.7
SEX						
Female	69.3	26.6	88.8	77.6	65.3	88.1
Male	65.4	21.0	85.5	74.6	62.6	83.2
SIZE OF COMMUNITY						
Big City	58.4	17.6	75.4	68.3	53.6	77.3
Fringe City	70.3	30.0	89.6	74.8	69.1	87.9
Medium City	68.8	22.5	88.9	80.5	65.6	86.6
Smaller Place	70.1	24.3	92.1	79.3	65.7	89.3
CAREER GUIDANCE OR EDUCATION						
Yes	63.5	18.8	83.6	73.8	58.3	83.0
No	68.6	25.2	88.4	77.1	65.7	86.5
COUNSELOR DISCUSSIONS						
Yes	67.1	23.1	87.8	76.2	62.1	86.1
No	68.5	25.0	88.3	77.5	65.8	86.0
Don't Remember	60.4	17.5	77.9	68.1	56.4	81.9
PLANNING VOC-TECH SCHOOL						
Yes	62.7	21.9	78.0	75.3	59.4	78.3
No	68.7	25.5	88.8	75.7	66.8	86.9
Undecided	67.0	22.1	88.1	77.0	60.9	86.7
JOB DECISION						
Yes	66.9	23.7	86.6	75.3	63.7	85.3
No	68.2	23.8	88.2	78.2	64.2	86.5

NOTE: For the full text of the demographic questions see Section II -- Sample Design

TABLE E.1.14 -- ST. DEV OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTEN) DOMAIN 211 -- SELF AWARENESS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX O)				
		32	33	34	35	36
CONNECTICUT	0.4	0.9	0.7	0.9	1.0	0.7
SEX						
Female	0.6	1.3	0.9	1.2	1.4	1.0
Male	0.6	1.2	1.1	1.3	1.5	1.1
SIZE OF COMMUNITY						
Big City	1.0	1.7	2.0	2.1	2.3	1.9
Fringe City	0.9	2.0	1.3	1.9	2.0	1.4
Medium City	0.9	1.7	1.3	1.7	2.0	1.4
Smaller Place	0.8	1.7	1.0	1.6	1.8	1.2
CAREER GUIDANCE OR EDUCATION						
Yes	1.0	1.7	1.7	2.0	2.2	1.7
No	0.5	1.0	0.8	1.0	1.1	0.8
COUNSELOR DISCUSSIONS						
Yes	0.8	1.7	1.3	1.7	2.0	1.4
No	0.6	1.2	0.9	1.1	1.3	0.9
Don't Remember	1.5	2.6	2.8	3.2	3.4	2.6
PLANNING VOC-TECH SCHOOL						
Yes	1.2	2.4	2.4	2.5	2.8	2.4
No	0.6	1.3	0.9	1.3	1.4	1.0
Undecided	0.8	1.5	1.2	1.5	1.8	1.2
JOB DECISION						
Yes	0.6	1.1	0.9	1.1	1.3	0.9
No	0.7	1.5	1.1	1.5	1.7	1.2

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.15 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 212 -- LIFE EXPERIENCES
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)					
		37	38	39	40	41	42
CONNECTICUT	61.1	42.5	75.2	45.8	56.1	84.9	62.2
SEX							
Female	62.1	43.0	75.4	46.4	55.6	87.3	64.8
Male	60.1	41.9	75.2	45.0	56.4	82.3	59.6
SIZE OF COMMUNITY							
Big City	54.3	41.0	60.7	43.2	53.2	71.9	55.8
Fringe City	63.6	42.6	79.5	47.2	59.4	89.0	63.7
Medium City	62.8	44.0	78.1	48.5	56.0	87.1	63.1
Smaller Place	62.5	42.1	79.7	44.1	55.4	89.0	64.9
CAREER GUIDANCE OR EDUCATION							
Yes	59.7	40.1	72.7	46.2	58.5	78.8	62.2
No	61.7	43.3	76.2	45.8	55.4	86.7	62.7
COUNSELOR DISCUSSIONS							
Yes	61.9	40.2	77.6	50.4	55.9	83.1	64.4
No	61.8	42.5	76.4	44.4	56.9	87.8	62.8
Don't Remember	55.2	48.3	62.4	42.8	52.2	70.5	54.8
PLANNING VOC-TECH SCHOOL							
Yes	58.6	47.3	65.3	49.0	56.7	75.6	57.6
No	62.2	41.6	77.8	48.1	55.5	86.5	63.9
Undecided	60.5	41.1	75.3	41.2	57.0	86.0	62.3
JOB DECISION							
Yes	60.5	41.2	74.9	44.8	55.5	83.8	62.6
No	52.6	44.4	76.4	48.0	57.4	87.0	62.2

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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TABLE E.1.16 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 212 -- LIFE EXPERIENCES
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	37	38	39	40	41	42
CONNECTICUT	0.4	1.0	0.9	1.0	1.0	0.8	1.0
SEX							
Female	0.6	1.5	1.3	1.5	1.5	1.0	1.4
Male	0.6	1.5	1.3	1.5	1.5	1.1	1.5
SIZE OF COMMUNITY							
Big City	0.9	2.3	2.2	2.3	2.3	2.1	2.3
Fringe City	0.8	2.1	1.7	2.1	2.1	1.3	2.1
Medium City	0.8	2.1	1.7	2.1	2.1	1.4	2.0
Smaller Place	0.8	1.9	1.6	1.9	1.9	1.2	1.8
CAREER GUIDANCE OR EDUCATION							
Yes	0.9	2.2	2.0	2.2	2.2	1.8	2.2
No	0.5	1.2	1.0	1.2	1.2	0.8	1.2
COUNSELOR DISCUSSIONS							
Yes	0.8	2.0	1.7	2.0	2.0	1.7	1.9
No	0.5	1.3	1.1	1.3	1.3	0.9	1.3
Don't Remember	1.4	3.4	3.3	3.4	3.4	3.1	3.4
PLANNING VOC-TECH SCHOOL							
Yes	1.2	2.9	2.7	2.9	2.8	2.5	2.8
No	0.6	1.5	1.2	1.5	1.5	1.0	1.4
Undecided	0.7	1.8	1.6	1.8	1.8	1.3	1.8
JOB DECISION							
Yes	0.5	1.3	1.2	1.3	1.3	1.0	1.3
No	0.7	1.8	1.5	1.8	1.7	1.2	1.7

QUESTION NUMBER (SEE APPENDIX O)

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.17 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 213 -- SCHOOL SUBJECT AREAS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)			
		43	44	45	46
CONNECTICUT	56.1	60.1	61.2	51.7	51.4
SEX					
Female	56.7	60.8	59.4	52.6	54.2
Male	55.4	59.3	63.2	50.6	48.4
SIZE OF COMMUNITY					
Big City	42.6	46.9	44.6	37.7	41.4
F-inge City	62.6	67.8	68.9	58.3	55.6
Medium City	56.6	58.8	63.2	53.2	51.3
Smaller Place	59.9	64.4	65.2	55.0	55.2
CAREER GUIDANCE OR EDUCATION					
Yes	52.7	61.4	58.0	45.0	46.6
No	57.2	60.0	62.5	53.6	52.9
COUNSELOR DISCUSSIONS					
Yes	56.3	60.5	62.7	51.7	50.3
No	58.0	62.1	62.9	53.9	53.1
Don't Remember	43.6	46.9	46.8	37.2	43.7
PLANNING VOC-TECH SCHOOL					
Yes	47.8	46.4	56.6	44.5	43.8
No	59.7	64.2	64.6	55.3	54.6
Undecided	54.0	59.6	58.6	48.5	49.4
JOB DECISION					
Yes	55.6	59.5	60.2	51.3	51.5
No	57.3	61.8	63.6	52.5	51.2

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.18 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 213 -- SCHOOL SUBJECT AREAS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)			
		43	44	45	46
CONNECTICUT	0.5	1.0	1.0	.1	1.1
SEX					
Female	0.7	1.4	1.4	1.5	1.5
Male	0.7	1.5	1.5	1.5	1.5
SIZE OF COMMUNITY					
Big City	1.1	2.3	2.3	2.2	2.3
Fringe City	1.0	2.0	2.0	2.1	2.1
Medium City	1.0	2.1	2.0	2.1	2.1
Smaller Place	0.9	1.9	1.8	1.9	1.9
CAREER GUIDANCE OR EDUCATION					
Yes	1.1	2.2	2.2	2.2	2.2
No	0.6	1.2	1.2	1.2	1.2
COUNSELOR DISCUSSIONS					
Yes	1.0	2.0	2.0	2.0	2.0
No	0.7	1.3	1.3	1.3	1.3
Don't Remember	1.7	3.4	3.4	3.3	3.4
PLANNING VOC-TECH SCHOOL					
Yes	1.4	2.9	2.9	2.9	2.9
No	0.7	1.4	1.4	1.5	1.5
Undecided	0.9	1.8	1.8	1.8	1.8
JOB DECISION					
Yes	0.7	1.3	1.3	1.3	1.3
No	0.9	1.7	1.7	1.8	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.19 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS CONTENT DOMAIN 221 -- ABILITIES AND INTERESTS (IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		47	48	49	50	51
CONNECTICUT	40.4	55.0	46.8	39.6	32.3	28.5
SEX						
Female	40.5	57.4	46.9	39.1	30.5	28.8
Male	40.3	52.2	46.8	40.0	34.2	28.4
SIZE OF COMMUNITY						
Big City	35.1	47.4	38.6	39.D	26.3	24.1
Fringe City	41.3	55.8	52.0	35.6	35.1	28.0
Medium Ci	42.0	58.2	47.0	41.8	31.1	31.7
Smaller Place	42.2	56.9	48.4	41.3	35.3	29.3
CAREER GUIDANCE OR EDUCATION						
Yes	38.3	49.8	43.8	38.1	30.1	29.5
No	41.1	56.3	47.9	40.2	33.0	28.3
COUNSELOR DISCUSSIONS						
Yes	40.2	50.2	49.4	42.7	30.2	28.
No	41.6	57.8	47.5	39.3	34.1	29.3
Don't Remember	33.3	47.5	35.4	34.1	27.7	21.9
PLANNING VOC-TECH SCHOOL						
Yes	39.0	51.3	43.5	42.9	28.8	29.8
No	40.7	55.7	47.6	39.3	32.9	28.2
Undecided	40.4	54.9	47.5	38.9	32.5	28.D
JOB DECISION						
Yes	40.2	53.4	46.3	40.9	31.9	28.5
No	40.7	57.1	48.1	37.5	33.1	27.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.20 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 221 -- ABILITIES AND INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		47	48	49	50	51
CONNECTICUT	0.5	1.0	1.0	1.0	1.0	0.9
SEX						
Female	0.6	1.5	1.5	1.4	1.4	1.3
Male	0.7	1.5	1.5	1.5	1.4	1.4
SIZE OF COMMUNITY						
Big City	1.0	2.3	2.2	2.2	2.0	2.0
Fringe City	0.9	2.1	2.1	2.1	2.0	1.9
Medium City	0.9	2.1	2.1	2.1	1.9	1.9
Smaller Place	0.9	1.9	1.9	1.9	1.8	1.8
CAREER GUIDANCE OR EDUCATION						
Yes	1.0	2.2	2.2	2.2	2.0	2.0
No	0.5	1.2	1.2	1.2	1.1	1.1
COUNSELOR DISCUSSIONS						
Yes	0.9	2.0	2.0	2.0	1.9	1.9
No	0.6	1.3	1.3	1.3	1.3	1.2
Don't Remember	1.4	3.4	3.3	3.3	3.1	2.8
PLANNING VOC-TECH SCHOOL						
Yes	1.3	2.9	2.9	2.8	2.6	2.6
No	0.7	1.5	1.5	1.5	1.4	1.3
Undecided	0.8	1.8	1.8	1.8	1.7	1.6
JOB DECISION						
Yes	0.6	1.3	1.3	1.3	1.2	1.2
No	0.8	1.7	1.8	1.7	1.7	1.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.21 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 222 -- STEPS IN PLANNING
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)						
		52	53	54	55	56	57	58
CONNECTICUT	22.0	10.9	16.3	30.8	19.6	29.0	24.1	23.2
SEX								
Female	22.5	10.7	16.3	31.4	19.8	29.9	24.7	24.4
Male	21.6	11.2	16.3	30.4	19.5	28.1	23.6	22.0
SIZE OF COMMUNITY								
Big City	16.0	6.1	13.1	18.5	15.1	19.4	16.3	21.4
Fringe City	23.6	12.9	18.5	36.3	20.2	29.8	25.3	22.0
Medium City	23.2	12.5	16.7	32.0	18.0	32.4	27.5	23.0
Smaller Place	23.9	9.8	16.3	34.2	23.7	32.2	25.7	25.6
CAREER GUIDANCE OR EDUCATION								
Yes	21.2	10.5	15.3	28.5	20.6	27.3	22.7	23.4
No	22.4	11.2	16.5	31.9	19.7	29.6	24.6	23.3
COUNSELOR DISCUSSIONS								
Yes	22.8	10.9	17.5	30.6	20.3	30.3	24.7	25.4
No	22.7	11.9	16.5	32.3	20.3	30.1	25.1	22.8
Don't Remember	15.8	5.9	10.5	22.2	15.0	20.1	17.9	19.2
PLANNING VOC-TECH SCHOOL								
Yes	17.7	10.6	15.8	21.7	18.1	22.9	15.4	19.3
No	23.5	11.0	18.0	32.3	21.1	31.2	26.0	24.6
Undecided	21.8	11.3	13.9	32.4	18.7	28.7	25.1	22.7
JOB DECISION								
Yes	21.6	10.5	16.2	28.6	18.9	29.3	24.4	23.3
No	22.9	12.1	15.9	34.9	21.2	29.1	24.3	23.1

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.22 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 222 -- STEPS IN PLANNING
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)						
		52	53	54	55	56	57	58
CONNECTICUT	0.3	0.7	0.8	1.0	0.8	1.0	0.9	0.9
SEX								
Female	0.5	0.9	1.1	1.4	1.2	1.3	1.3	1.3
Male	0.5	0.9	1.1	1.4	1.2	1.4	1.3	1.2
SIZE OF COMMUNITY								
Big City	0.6	1.2	1.5	1.8	1.6	1.8	1.7	1.9
Fringe City	0.7	1.4	1.7	2.1	1.7	2.0	1.9	1.8
Medium City	0.7	1.4	1.6	2.0	1.6	2.0	1.9	1.8
Smaller Place	0.6	1.1	1.4	1.8	1.6	1.8	1.7	1.7
CAREER GUIDANCE OR EDUCATION								
Yes	0.7	1.4	1.6	2.0	1.8	2.0	1.9	1.9
No	0.4	0.8	0.9	1.1	1.0	1.1	1.0	1.0
COUNSELOR DISCUSSIONS								
Yes	0.6	1.3	1.5	1.9	1.6	1.9	1.7	1.8
No	0.4	0.9	1.0	1.3	1.1	1.2	1.2	1.1
Don't Remember	0.9	1.6	2.1	2.9	2.5	2.8	2.6	2.7
PLANNING VOC-TECH SCHOOL								
Yes	0.8	1.8	2.1	2.4	2.2	2.4	2.1	2.3
No	0.5	0.9	1.1	1.4	1.2	1.4	1.3	1.3
Undecided	0.6	1.2	1.3	1.7	1.4	1.6	1.6	1.5
JOB DECISION								
Yes	0.4	0.8	1.0	1.2	1.0	1.2	1.1	1.1
No	0.6	1.1	1.3	1.7	1.4	1.6	1.5	1.5

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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TABLE E.1.23 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 224 -- SATISFACTION FROM WORK
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	59	60	61	62	63	64	65	66	67	68	69	70
CONNECTICUT	49.6	55.8	64.5	43.5	17.6	79.4	24.5	61.6	39.4	78.0	79.9	17.5	33.2
SEX													
Female	51.5	53.6	67.5	46.7	13.4	82.8	24.0	65.5	42.0	81.7	84.1	17.5	38.8
Male	47.7	58.2	61.5	40.3	22.1	76.0	24.9	57.4	37.0	74.2	75.8	17.6	27.3
SIZE OF COMMUNITY													
Big City	38.9	40.1	45.8	40.5	13.8	58.9	27.4	42.7	26.8	62.8	59.0	16.3	32.7
Fringe City	53.4	62.1	70.5	42.8	20.6	88.2	23.0	68.8	44.0	83.6	86.5	18.0	32.7
Medium City	50.6	58.4	66.6	44.5	18.8	82.0	22.6	63.6	38.6	80.3	84.2	16.1	31.3
Smaller Place	53.2	59.7	71.2	45.4	17.0	84.5	25.3	67.4	45.5	82.2	85.9	19.2	35.6
CAREER GUIDANCE OR EDUCATION													
Yes	44.7	49.1	57.8	37.3	17.5	69.6	23.8	55.1	35.6	72.4	73.0	15.3	30.0
No	51.2	58.1	66.6	45.8	17.7	82.6	24.8	63.7	41.0	79.9	82.5	18.1	34.0
COUNSELOR DISCUSSIONS													
Yes	49.9	54.6	67.9	44.8	18.7	78.9	26.3	62.0	38.3	78.2	80.8	17.4	31.5
No	51.0	58.6	64.9	44.3	18.2	82.2	23.6	63.2	42.0	80.1	83.0	17.2	34.3
Don't Remember	40.5	42.6	52.9	36.7	10.9	64.5	24.6	50.3	28.2	65.0	61.4	18.9	30.5
PLANNING VOC-TECH SCHOOL													
Yes	41.6	46.1	53.1	39.3	16.4	65.6	26.1	49.6	28.6	65.4	65.5	11.6	31.6
No	52.2	59.9	67.7	45.5	19.3	84.1	24.2	66.1	44.0	81.7	83.6	17.6	32.3
Undecided	49.3	54.2	64.0	43.0	16.0	78.5	24.8	60.3	37.4	77.7	81.3	19.1	35.2
JOB DECISION													
Yes	49.3	56.0	63.5	45.8	17.1	77.7	24.0	60.1	39.2	77.5	79.0	17.1	34.2
No	50.5	56.1	66.4	40.4	18.7	83.0	25.1	64.3	40.5	79.4	82.3	18.3	31.1

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.24 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 224 -- SATISFACTION FROM WORK
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	59	60	61	62	63	64	65	66	67	68	69	70
CONNECTICUT	0.3	1.0	1.0	1.0	0.8	0.9	0.9	1.0	1.0	0.9	0.8	0.8	1.0
SEX													
Female	0.4	1.5	1.4	1.5	1.0	1.1	1.3	1.4	1.5	1.1	1.1	1.1	1.4
Male	0.4	1.5	1.5	1.5	1.2	1.3	1.3	1.5	1.5	1.3	1.3	1.1	1.3
SIZE OF COMMUNITY													
Big City	0.6	2.2	2.3	2.2	1.6	2.3	2.0	2.3	2.0	2.2	2.3	1.7	2.1
Fringe City	0.6	2.1	2.0	2.1	1.7	1.4	1.8	2.0	2.1	1.6	1.5	1.6	2.0
Medium City	0.6	2.1	2.0	2.1	1.6	1.6	1.7	2.0	2.0	1.7	1.5	1.5	1.9
Smaller Place	0.6	1.9	1.8	1.9	1.5	1.4	1.7	1.8	1.9	1.5	1.3	1.5	1.9
CAREER GUIDANCE OR EDUCATION													
Yes	0.6	2.2	2.2	2.2	1.7	2.1	1.9	2.2	2.1	2.0	2.0	1.6	2.0
No	0.3	1.2	1.1	1.2	0.9	0.9	1.0	1.2	1.2	1.0	0.9	0.9	1.1
COUNSELOR DISCUSSIONS													
Yes	0.6	2.0	1.9	2.0	1.6	1.6	1.8	2.0	2.0	1.7	1.6	1.5	1.9
No	0.4	1.3	1.3	1.3	1.0	1.0	1.1	1.3	1.3	1.1	1.0	1.0	1.3
Don't Remember	1.0	3.4	3.4	3.3	2.1	3.3	3.0	3.4	3.1	3.3	3.3	2.7	3.2
PLANNING VOC-TECH SCHOOL													
Yes	0.3	2.9	2.9	2.8	2.1	2.7	2.5	2.9	2.6	2.7	2.7	1.8	2.7
No	0.4	1.5	1.4	1.5	1.2	1.1	1.3	1.4	1.5	1.2	1.1	1.1	1.4
Undecided	0.5	1.8	1.7	1.8	1.3	1.5	1.6	1.8	1.8	1.5	1.4	1.4	1.7
JOB DECISION													
Yes	0.4	1.3	1.3	1.3	1.0	1.1	1.1	1.3	1.3	1.1	1.1	1.0	1.3
No	0.5	1.7	1.7	1.7	1.4	1.3	1.5	1.7	1.7	1.4	1.3	1.4	1.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.25 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLOS
CONTENT DOMAIN 311 -- TRAINING PROGRAMS
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	71	72	73	74	75	76	77	78	79	80
CONNECTICUT	31.7	70.7	23.1	11.0	28.0	13.6	17.3	53.0	15.9	36.8	47.4
SEX											
Female	31.7	72.2	22.4	11.8	30.1	12.8	16.3	50.9	15.6	37.3	47.4
Male	31.8	69.3	24.0	10.3	25.9	14.5	18.4	55.4	16.2	36.2	47.5
SIZE OF COMMUNITY											
Big City	27.5	55.3	21.7	14.9	26.9	12.3	18.5	35.5	15.0	34.9	40.3
Fringe City	33.2	74.3	23.9	9.8	32.4	14.3	15.1	60.7	17.5	35.6	48.2
Medium City	32.5	71.4	25.9	10.8	28.2	13.3	17.2	55.0	15.7	39.7	47.4
Smaller Place	32.8	78.2	21.0	9.5	25.1	14.3	18.2	57.6	15.5	36.8	51.9
CAREER GUIDANCE OR EDUCATION											
Yes	30.5	65.7	25.4	11.2	26.0	13.8	18.6	49.3	16.0	34.2	45.0
No	32.3	72.9	22.5	11.2	28.6	13.7	17.1	54.4	16.0	38.0	48.4
COUNSELOR DISCUSSIONS											
Yes	31.7	68.8	22.3	10.1	29.9	13.2	16.3	55.3	15.5	39.2	46.3
No	32.6	74.3	23.8	11.6	27.5	13.2	17.6	54.9	16.2	37.7	49.1
Don't Remember	27.4	57.5	20.9	12.0	27.0	17.4	19.8	36.8	15.5	26.6	40.1
PLANNING VOC-TECH SCHOOL											
Yes	30.4	64.6	28.4	10.2	24.5	16.6	19.6	43.0	16.5	37.8	42.6
No	33.1	73.5	24.1	12.0	29.3	12.9	19.2	58.4	15.3	38.1	48.6
Undecided	30.4	70.5	19.8	10.2	27.3	13.5	14.2	49.3	16.6	34.8	47.8
JOB DECISION											
Yes	31.9	70.4	23.5	10.7	29.6	13.4	18.1	53.3	15.3	37.7	47.3
No	31.7	72.0	22.3	12.1	25.6	13.8	16.4	53.4	16.8	36.0	47.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.26 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 311 -- TRAINING PROGRAMS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)									
		71	72	73	74	75	76	77	78	79	80
CONNECTICUT	0.3	1.0	0.9	0.7	0.9	0.7	0.8	1.0	0.9	1.0	1.0
SEX											
Female	0.4	1.3	1.2	1.0	1.4	1.0	1.1	1.5	1.1	1.4	1.5
Male	0.4	1.4	1.3	0.9	1.3	1.1	1.2	1.5	1.1	1.4	1.5
SIZE OF COMMUNITY											
Big City	0.6	2.3	1.9	1.6	2.0	1.5	1.8	2.2	1.6	2.2	2.2
Fringe City	0.6	1.9	1.8	1.3	2.0	1.5	1.5	2.1	1.6	2.1	2.1
Medium City	0.5	1.9	1.8	1.3	1.9	1.4	1.6	2.1	1.5	2.0	2.1
Smaller Place	0.6	1.6	1.6	1.1	1.7	1.4	1.5	1.9	1.4	1.9	1.9
CAREER GUIDANCE OR EDUCATION											
Yes	0.7	2.1	1.9	1.4	2.0	1.5	1.?	2.2	1.6	2.1	2.2
No	0.4	1.1	1.0	0.8	1.1	0.8	0.9	1.2	0.9	1.2	1.2
COUNSELOR DISCUSSIONS											
Yes	0.6	1.9	1.7	1.2	1.8	1.4	1.5	2.0	1.5	2.0	2.0
No	0.4	1.2	1.1	0.9	1.2	0.9	1.0	1.3	1.0	1.3	1.3
Don't Remember	1.0	3.4	2.8	2.2	3.0	2.6	2.7	3.3	2.5	3.0	3.4
PLANNING VOC-TECH SCHOOL											
Yes	0.8	2.8	2.6	1.7	2.5	2.1	2.3	2.8	2.1	2.8	2.8
No	0.4	1.3	1.3	1.0	1.4	1.0	1.2	1.5	1.1	1.4	1.5
Undecided	0.5	1.7	1.5	1.1	1.6	1.2	1.3	1.8	1.4	1.7	1.8
JOB DECISION											
Yes	0.4	1.2	1.1	0.8	1.2	0.9	1.0	1.3	1.0	1.3	1.3
No	0.5	1.6	1.5	1.1	1.5	1.2	1.3	1.8	1.3	1.7	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.27 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLOS
CONTENT DOMAIN 312 -- RELATED ACTIVITIES
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	81	82	83	84	85	86	87
CONNECTICUT	27.4	29.3	48.0	20.9	8.8	32.1	31.3	21.2
SEX								
Female	28.2	29.2	51.4	20.9	9.4	32.0	32.3	22.3
Male	26.5	29.7	44.5	20.9	8.2	32.4	30.0	20.1
SIZE OF COMMUNITY								
Big City	23.2	21.9	36.2	19.9	14.9	24.8	27.2	17.4
Fringe City	29.9	36.4	51.0	23.9	6.6	33.4	33.0	25.2
Medium City	27.5	27.9	51.1	20.0	7.6	34.8	32.0	19.1
Smaller Place	28.2	30.0	51.3	20.0	7.3	34.0	32.1	22.5
CAREER GUIDANCE OR EDUCATION								
Yes	25.5	29.4	45.3	18.9	9.3	26.4	29.1	19.8
No	28.2	29.8	49.4	21.6	8.5	34.1	32.3	21.4
COUNSELOR DISCUSSIONS								
Yes	26.4	27.7	47.8	19.2	10.0	29.9	28.5	21.9
No	28.5	30.4	49.7	21.9	8.6	35.5	33.7	21.4
Don't Remember	24.1	30.0	39.8	20.8	7.2	29.6	25.3	16.0
PLANNING VOC-TECH SCHOOL								
Yes	24.6	23.9	44.6	20.5	9.8	28.0	25.4	20.1
No	29.1	31.9	52.3	20.3	8.6	34.6	33.4	22.6
Undecided	26.4	29.2	44.1	22.8	8.8	30.5	30.8	18.9
JOB DECISION								
Yes	27.5	29.2	49.1	20.3	9.2	32.4	30.9	21.5
No	27.3	30.4	46.9	21.9	8.0	31.4	32.3	20.1

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.28 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 312 -- RELATED ACTIVITIES
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)						
		81	82	83	84	85	86	87
CONNECTICUT	0.4	1.0	1.1	0.9	0.6	1.0	1.0	0.9
SEX								
Female	0.5	1.3	1.5	1.2	0.9	1.4	1.4	1.2
Male	0.5	1.4	1.5	1.2	0.8	1.4	1.4	1.2
SIZE OF COMMUNITY								
Big City	0.7	1.9	2.2	1.8	1.6	2.0	2.0	1.7
Fringe City	0.7	2.1	2.1	1.8	1.1	2.0	2.0	1.9
Medium City	0.7	1.9	2.1	1.7	1.1	2.0	2.0	1.6
Smaller Place	0.7	1.8	1.9	1.5	1.0	1.8	1.8	1.6
CAREER GUIDANCE OR EDUCATION								
Yes	0.7	2.0	2.2	1.7	1.3	2.0	2.0	1.8
No	0.4	1.1	1.2	1.0	0.7	1.1	1.1	1.0
COUNSELOR DISCUSSIONS								
Yes	0.7	1.8	2.0	1.6	1.2	1.8	1.8	1.7
No	0.5	1.2	1.3	1.1	0.7	1.3	1.3	1.1
Don't Remember	1.1	3.1	3.4	2.8	1.8	3.1	3.0	2.5
PLANNING VOC-TECH SCHOOL								
Yes	0.9	2.5	2.9	2.3	1.7	2.6	2.5	2.3
No	0.5	1.4	1.5	1.2	0.8	1.4	1.4	1.2
Undecided	0.6	1.7	1.8	1.5	1.0	1.7	1.7	1.4
JOB DECISION								
Yes	0.4	1.2	1.3	1.1	0.8	1.2	1.2	1.1
No	0.6	1.6	1.8	1.5	1.0	1.6	1.6	1.4

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.29 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 321 -- LEVEL/ABILITIES/INTERESTS
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	88	89	90	91	92
CONNECTICUT	34.0	35.3	32.0	38.9	44.1	20.1
SEX						
Female	33.5	32.4	32.3	39.8	43.6	19.4
Male	34.7	38.4	31.6	38.1	44.6	20.8
SIZE OF COMMUNITY						
Big City	26.1	27.3	24.4	24.7	29.0	25.3
Fringe City	38.1	40.3	34.5	46.0	50.9	18.9
Medium City	34.0	33.2	32.3	41.6	45.9	17.2
Smaller Place	36.4	38.6	35.0	40.8	47.7	19.8
CAREER GUIDANCE OR EDUCATION						
Yes	31.3	32.7	31.3	32.6	36.5	23.6
No	35.3	36.6	32.4	41.2	46.7	19.5
COUNSELOR DISCUSSIONS						
Yes	35.2	36.7	32.1	41.3	46.1	19.7
No	35.0	36.3	33.0	40.7	45.0	20.0
Don't Remember	27.3	27.7	26.3	22.5	34.6	25.5
PLANNING VOC-TECH SCHOOL						
Yes	30.3	30.2	25.8	37.3	36.6	21.6
No	36.3	39.3	34.5	40.7	48.4	18.4
Undecided	33.1	32.3	31.6	37.7	41.2	22.7
JOB DECISION						
Yes	33.7	34.7	31.1	38.0	44.4	20.4
No	35.3	37.2	33.8	41.0	44.1	20.4

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.30 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 13 YEAR OLDS
CONTENT DOMAIN 321 -- LEVEL/ABILITIES/INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		88	89	90	91	92
CONNECTICUT	0.4	1.0	1.0	1.0	1.0	0.8
SEX						
Female	0.6	1.4	1.4	1.4	1.5	1.2
Male	0.6	1.5	1.4	1.5	1.5	1.2
SIZE OF COMMUNITY						
Big City	0.9	2.0	2.0	2.0	2.1	2.0
Fringe City	0.9	2.1	2.0	2.1	2.1	1.7
Medium City	0.9	2.0	2.0	2.1	2.1	1.6
Smaller Place	0.8	1.9	1.8	1.9	1.9	1.5
CAREER GUIDANCE OR EDUCATION						
Yes	0.9	2.1	2.1	2.1	2.2	1.9
No	0.5	1.2	1.1	1.2	1.2	1.0
COUNSELOR DISCUSSIONS						
Yes	0.9	1.9	1.9	2.0	2.0	1.6
No	0.6	1.3	1.3	1.3	1.3	1.1
Don't Remember	1.4	3.1	3.0	2.9	3.3	3.0
PLANNING VOC-TECH SCHOOL						
Y-s	1.2	2.6	2.5	2.8	2.8	2.4
No	0.6	1.5	1.4	1.5	1.5	1.2
Undecided	0.8	1.7	1.7	1.8	1.8	1.5
JOB DECISION						
Yes	0.6	1.3	1.2	1.3	1.3	1.1
No	0.8	1.7	1.7	1.7	1.8	1.4

NOTE: For the full text of the demographic questions see Section III -- Sample Design.

TABLE E.1.31 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 114 -- JOB SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)						
		1	2	3	4	5	6	7
CONNECTICUT	65.9	55.1	83.1	64.7	68.9	55.3	73.5	60.9
SEX								
Female	66.6	55.6	85.2	67.3	73.0	51.2	73.7	60.0
Male	65.2	54.6	80.7	61.7	64.4	59.8	73.4	61.8
SIZE OF COMMUNITY								
Big City	61.2	55.3	84.4	70.9	62.0	46.3	59.8	50.0
Fringe City	66.1	45.8	81.2	57.2	71.2	59.4	80.0	67.9
Medium City	67.5	62.5	83.4	67.4	68.1	56.1	73.8	60.9
Smaller Place	67.7	56.4	83.5	64.4	72.3	57.4	77.2	62.4
CAREER GUIDANCE OR EDUCATION								
Yes	64.8	53.4	84.1	68.8	68.3	53.2	69.6	56.2
No	66.4	55.7	82.7	63.1	69.1	56.1	75.1	62.8
COUNSELOR DISCUSSIONS								
Yes	67.2	55.0	83.8	64.5	71.8	56.8	76.4	61.8
No	64.2	54.7	83.3	64.3	63.7	53.9	69.8	59.7
Don't Remember	61.3	58.3	75.4	66.9	61.6	46.1	62.0	58.8
WORK EXPERIENCE								
Regular Job	66.7	56.8	81.7	63.5	68.8	57.5	75.4	63.5
Summer Job	65.5	55.5	83.0	65.0	67.4	55.9	73.0	58.4
Not Worked	64.8	52.0	85.9	65.6	72.2	47.8	71.9	58.1
Work Study	67.2	46.8	86.2	70.9	71.9	56.9	71.7	66.0
JOB DECISION								
Yes	65.9	55.1	84.7	65.5	69.1	54.6	72.6	59.9
No	66.0	55.2	80.1	63.1	68.4	56.9	75.4	63.0

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.32 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 114 -- JOB SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)						
		1	2	3	4	5	6	7
CONNECTICUT	0.4	1.1	0.8	1.0	1.0	1.1	1.0	1.1
SEX								
Female	0.5	1.5	1.1	1.4	1.3	1.5	1.3	1.5
Male	0.6	1.6	1.2	1.5	1.5	1.6	1.4	1.5
SIZE OF COMMUNITY								
Big City	0.9	2.4	1.8	2.2	2.4	2.4	2.4	2.4
Fringe City	0.8	2.2	1.7	2.1	2.0	2.1	1.7	2.0
Medium City	0.8	2.1	1.6	2.0	2.0	2.1	1.9	2.1
Smaller Place	0.7	2.0	1.5	2.0	1.8	2.0	1.7	2.0
CAREER GUIDANCE OR EDUCATION								
Yes	0.7	2.0	1.5	1.9	1.9	2.0	1.9	2.0
No	0.5	1.3	1.0	1.3	1.2	1.3	1.1	1.3
COUNSELOR DISCUSSIONS								
Yes	0.5	1.3	1.0	1.3	1.2	1.3	1.1	1.3
No	0.7	2.0	1.5	2.0	2.0	2.1	1.9	2.0
Don't Remember	1.6	4.3	3.7	4.1	4.2	4.3	4.2	4.3
WORK EXPERIENCE								
Regular Job	0.6	1.6	1.3	1.6	1.5	1.6	1.4	1.6
Summer Job	0.7	1.8	1.4	1.7	1.7	1.8	1.6	1.8
Not Worked	1.1	3.0	2.1	2.9	2.7	3.0	2.7	3.0
Work Study	1.7	4.9	3.4	4.5	4.4	4.9	4.4	4.6
JOB DECISION								
Yes	0.5	1.4	1.0	1.3	1.3	1.4	1.2	1.3
No	0.7	1.8	1.5	1.8	1.7	1.8	1.6	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.33 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 115 -- LEVELS, FIELDS, EMPHASIS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		8	9	10	11	12
CONNECTICUT	56.1	57.8	62.9	45.6	61.6	52.8
SEX						
Female	57.7	59.8	64.5	47.5	62.9	53.7
Male	54.4	55.5	61.2	43.4	60.2	51.9
SIZE OF COMMUNITY						
Big City	48.8	52.5	55.6	37.0	53.8	44.9
Fringe City	60.5	62.1	65.3	48.9	67.1	59.3
Medium City	56.5	58.0	64.6	46.3	61.4	52.3
Smaller Place	57.0	57.4	64.3	47.9	62.5	53.0
CAREER GUIDANCE OR EDUCATION						
Yes	53.6	54.9	61.5	42.1	58.8	50.8
No	57.3	59.1	63.5	47.1	63.0	53.5
COUNSELOR DISCUSSIONS						
Yes	57.4	59.6	64.4	46.1	62.5	54 ⌐
No	54.5	54.8	60.4	45.8	61.6	49.8
Don't Remember	50.3	51.9	58.8	39.0	53.6	48.0
WORK EXPERIENCE						
Regular Job	53.4	59.9	64.4	49.3	63.5	54.9
Summer Job	55.3	57.5	63.7	43.0	60.9	51.3
Not Worked	53.3	53.0	62.0	42.0	59.5	50.0
Work Study	50.1	53.7	46.0	40.0	58.9	52.0
JOB DECISION						
Yes	56.1	59.4	63.5	44.8	59.9	52.8
No	56.3	54.8	62.0	47.0	64.8	53.0

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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TABLE E.1.34 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 115 -- LEVELS. FIELDS. EMPHASIS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		8	9	10	11	12
CONNECTICUT	0.5	1.1	1.1	1.1	1.1	1.1
SEX						
Female	0.7	1.5	1.5	1.5	1.5	1.5
Male	0.7	1.6	1.5	1.6	1.5	1.6
SIZE OF COMMUNITY						
Big City	1.1	2.4	2.4	2.4	2.4	2.4
Fringe City	0.9	2.1	2.1	2.2	2.0	2.1
Medium City	0.9	2.1	2.0	2.1	2.1	2.1
Smaller Place	0.9	2.0	2.0	2.0	2.0	2.0
CAREER GUIDANCE OR EDUCATION						
Yes	0.9	2.0	2.0	2.0	2.0	2.1
No	0.6	1.3	1.2	1.3	1.3	1.3
COUNSELOR DISCUSSIONS						
Yes	0.6	1.3	1.3	1.3	1.3	1.3
No	0.9	2.0	2.0	2.1	2.0	2.1
Don't Remember	1.9	4.3	4.3	4.2	4.3	4.3
WORK EXPERIENCE						
Regular Job	0.7	1.6	1.6	1.6	1.6	1.6
Summer Job	0.8	1.8	1.8	1.8	1.8	1.8
Not Worked	1.3	3.0	2.9	3.0	3.0	3.0
Work Study	2.2	4.9	4.9	4.8	4.8	4.9
JOB DECISION						
Yes	0.6	1.3	1.3	1.4	1.3	1.4
No	0.8	1.8	1.8	1.8	1.8	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.35 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 116 -- OCCUPATIONAL TRENDS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)					
		13	14	15	16	17	18
CONNECTICUT	42.4	45.7	24.5	44.0	25.6	29.8	84.8
SEX							
Female	41.6	44.3	26.2	42.2	23.2	29.9	84.1
Male	43.1	47.3	22.7	45.8	28.2	29.5	85.4
SIZE OF COMMUNITY							
Big City	40.2	47.7	20.7	37.0	22.0	34.9	79.1
Fringe City	43.6	41.9	28.2	46.5	25.5	32.2	87.6
Medium City	41.8	46.5	21.7	42.7	28.1	26.5	85.6
Smaller Place	43.2	46.9	26.6	47.8	25.8	27.0	85.4
CAREER GUIDANCE OR EDUCATION							
Yes	41.5	43.9	23.6	42.9	23.4	31.7	83.8
No	42.7	46.2	25.0	44.6	26.4	29.1	85.1
COUNSELOR DISCUSSIONS							
Yes	42.8	47.3	23.9	44.7	25.8	29.4	65.9
No	41.9	43.2	25.2	43.7	25.5	29.5	84.3
Don't Remember	39.7	40.5	27.5	38.5	23.6	33.9	74.1
WORK EXPERIENCE							
Regular Job	42.6	47.6	22.7	44.8	26.1	27.6	86.6
Summer Job	42.3	46.2	24.9	44.0	25.4	30.4	83.1
Not Worked	42.8	44.6	29.7	42.0	26.3	29.1	84.1
Work Study	40.9	30.9	21.1	42.6	24.0	42.2	84.8
JOB DECISION							
Yes	42.4	46.0	24.1	44.8	25.3	30.3	83.8
No	42.3	44.9	25.4	42.5	25.8	28.8	86.3

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)					
		13	14	15	16	17	18
CONNECTICUT	0.4	1.1	0.9	1.1	1.0	1.0	0.8
SEX							
Female	0.6	1.5	1.3	1.5	1.3	1.4	1.1
Male	0.6	1.6	1.3	1.6	1.4	1.4	1.1
SIZE OF COMMUNITY							
Big City	1.0	2.4	2.0	2.4	2.0	2.3	2.0
Fringe City	0.9	2.1	2.0	2.2	1.9	2.0	1.4
Medium City	0.9	2.1	1.8	2.1	1.9	1.9	1.5
Smaller Place	0.8	2.0	1.8	2.0	1.8	1.8	1.4
CAREER GUIDANCE OR EDUCATION							
Yes	0.8	2.0	1.7	2.0	1.7	1.9	1.5
No	0.5	1.3	1.1	1.3	1.1	1.2	0.9
COUNSELOR DISCUSSIONS							
Yes	0.5	1.4	1.2	1.3	1.2	1.?	0.9
No	0.8	2.0	1.8	2.0	1.8	1.9	1.5
Don't Remember	1.7	4.3	3.9	4.2	3.7	4.1	3.8
WORK EXPERIENCE							
Regular Job	0.7	1.6	1.4	1.6	1.4	1.5	1.1
Summer Job	0.7	1.8	1.6	1.8	1.6	1.7	1.4
Not Worked	1.2	3.0	2.8	3.0	2.7	2.7	2.2
Work Study	2.0	4.5	4.0	4.9	4.2	4.8	3.5
JOB DECISION							
Yes	0.5	1.4	1.2	1.4	1.2	1.3	1.0
No	0.7	1.8	1.6	1.8	1.6	1.7	1.3

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.37 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLOS
CONTENT DOMAIN 117 -- LEVELS AND EDUCATION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)					
		19	20	21	22	23	24
CONNECTICUT	42.1	29.3	59	37.0	76.4	40.9	9.6
SEX							
Female	41.5	27.5	61.6	36.2	77.0	37.2	9.7
Male	42.7	31.4	56.7	37.9	75.6	45.0	9.6
SIZE OF COMMUNITY							
Big City	40.7	27.3	54.8	33.6	74.6	31.0	12.8
Fringe City	45.5	33.4	61.2	44.9	82.8	46.2	4.7
Medium City	41.8	28.3	58.6	35.7	72.4	42.0	13.6
Smaller Place	40.2	28.1	53.8	33.6	75.6	42.2	8.1
CAREER GUIDANCE OR EOUCATION							
Yes	40.8	29.2	58.0	34.8	74.6	38.1	10.4
No	42.6	29.5	59.7	37.8	77.1	42.0	9.4
COUNSELOR DISCUSSIONS							
Yes	42.4	29.4	59.7	37.2	79.0	41.0	8.4
No	42.4	29.5	59.5	37.8	72.9	43.0	11.7
Don't Remember	37.5	29.5	53.0	31.2	66.9	30.3	13.9
WORK EXPERIENCE							
Regular Job	42.3	29.4	59.1	37.9	77.4	40.4	9.6
Summer Job	42.0	27.1	60.2	36.3	74.9	43.9	9.8
Not Worked	42.0	33.8	58.8	33.6	77.9	37.5	10.6
Work Study	42.3	34.6	58.4	41.3	76.2	34.4	8.7
JOB DECISION							
Yes	41.7	29.4	58.2	35.7	76.6	40.2	10.2
No	42.7	29.2	61.0	39.1	76.2	41.9	8.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.38 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 117 -- LEVELS AND EDUCATION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	19	20	21	22	23	24
			QUESTION NUMBER (SEE APPENDIX O)				
CONNECTICUT	0.4	1.0	1.1	1.1	0.9	1.1	0.6
SEX							
Female	0.6	1.4	1.5	1.5	1.3	1.5	0.9
Male	0.6	1.5	1.6	1.5	1.4	1.5	0.9
SIZE OF COMMUNITY							
Big City	1.0	2.2	2.3	2.3	2.1	2.3	1.6
Fringe City	0.9	2.0	2.1	2.2	1.6	2.2	0.9
Medium City	0.9	1.9	2.1	2.0	1.9	2.1	1.5
Smaller Place	0.8	1.8	2.0	1.9	1.8	2.0	1.1
CAREER GUIDANCE OR EDUCATION							
Yes	0.8	1.9	2.0	2.0	1.8	2.0	1.3
No	0.5	1.2	1.2	1.3	1.1	1.3	0.8
COUNSELOR DISCUSSIONS							
Yes	0.5	1.2	1.3	1.3	1.1	1.3	0.8
No	0.8	1.9	2.0	2.0	1.8	2.0	1.3
Don't Remember	1.7	4.0	4.3	4.0	4.1	4.0	3.0
WORK EXPERIENCE							
Regular Job	0.7	1.5	1.6	1.6	1.4	1.6	1.0
Summer Job	0.7	1.6	1.8	1.8	1.6	1.8	1.1
Not Worked	1.2	2.9	3.0	2.9	2.5	2.9	1.9
Work Study	2.0	4.7	4.8	4.8	4.2	4.7	2.8
JOB DECISION							
Yes	0.?	1.2	1.3	1.3	1.2	1.3	0.8
No	0.?	1.7	1.8	1.8	1.6	1.8	1.0

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)						
		25	26	27	28	29	30	31
CONNECTICUT	58.2	72.3	50.5	71.9	62.8	55.2	43.1	51.6
SEX								
Female	56.4	73.0	46.7	69.3	60.2	54.8	42.8	48.3
Male	60.1	71.5	54.5	74.8	65.5	55.7	43.5	55.3
SIZE OF COMMUNITY								
Big City	57.4	70.6	51.7	61.3	57.7	55.8	47.8	57.1
Fringe City	60.5	70.9	52.9	73.8	70.6	56.7	45.6	53.5
Medium City	58.1	73.3	48.6	75.8	62.6	56.8	40.6	49.3
Smaller Place	56.8	73.9	49.4	73.9	59.7	52.5	39.9	48.2
CAREER GUIDANCE OR EDUCATION								
Yes	58.2	70.2	50.9	70.8	62.6	54.6	43.5	55.0
No	58.2	73.3	50.5	72.2	62.7	55.5	43.0	50.2
COUNSELOR DISCUSSIONS								
Yes	58.3	72.7	51.3	72.5	62.4	55.9	43.0	50.5
No	58.2	72.8	47.6	72.8	62.7	54.5	43.5	53.4
Don't Remember	57.3	67.2	55.7	63.3	66.9	51.2	42.4	54.6
WORK EXPERIENCE								
Regular Job	59.2	72.4	53.3	74.8	63.4	55.7	43.7	51.4
Summer Job	58.0	71.0	48.6	70.6	62.4	56.0	43.3	54.3
Not Worked	56.8	79.5	48.7	68.5	61.8	53.2	39.9	46.0
Work Study	56.0	65.6	47.1	71.2	64.3	49.9	45.3	48.3
JOB DECISION								
Yes	57.4	71.8	49.1	71.4	61.2	53.2	43.4	51.7
No	59.7	73.3	52.9	73.2	65.7	58.8	42.5	51.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.40 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 11B -- LEISURE TIME
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX O)						
		25	26	27	28	29	30	31
CONNECTICUT	0.4	1.0	1.1	1.0	1.1	1.1	1.1	1.1
SEX								
Female	0.6	1.3	1.5	1.4	1.5	1.5	1.5	1.5
Male	0.6	1.4	1.6	1.4	1.5	1.6	1.6	1.6
SIZE OF COMMUNITY								
Big City	0.9	2.2	2.4	2.4	2.4	2.4	2.4	2.4
Fringe City	0.8	2.0	2.2	1.9	2.0	2.2	2.2	2.2
Medium City	0.8	1.9	2.1	1.8	2.1	2.1	2.1	2.1
Smaller Place	0.8	1.8	2.0	1.8	2.0	2.0	2.0	2.0
CAREER GUIDANCE OR EDUCATION								
Yes	0.8	1.9	2.1	1.9	2.0	2.0	2.0	2.0
No	0.5	1.1	1.3	1.2	1.3	1.3	1.3	1.3
COUNSELOR DISCUSSIONS								
Yes	0.5	1.2	1.4	1.2	1.3	1.3	1.3	1.4
No	0.8	1.8	2.1	1.8	2.0	2.0	2.0	2.1
Don't Remember	1.6	4.1	4.3	4.2	4.1	4.3	4.3	4.3
WORK EXPERIENCE								
Regular Job	0.6	1.5	1.6	1.4	1.6	1.6	1.6	1.6
Summer Job	0.7	1.7	1.8	1.7	1.8	1.8	1.8	1.8
Not Worked	1.1	2.4	3.0	2.8	2.9	3.0	3.0	3.0
Work Study	1.8	4.7	4.9	4.4	4.7	4.9	4.9	4.9
JOB DECISION								
Yes	0.5	1.2	1.4	1.2	1.3	1.4	1.4	1.4
No	0.7	1.6	1.8	1.6	1.7	1.8	1.8	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.41 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 119 -- SPECIALIZATION/SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		32	33	34	35	36
CONNECTICUT	49.7	25.8	33.1	71.5	52.3	65.9
SEX						
Female	51.1	24.5	34.6	73.6	54.4	68.4
Male	48.1	27.2	31.4	69.4	49.8	62.9
SIZE OF COMMUNITY						
Big City	43.9	19.6	33.9	65.5	42.9	57.4
Fringe City	52.7	29.0	31.9	72.8	58.8	71.1
Medium City	49.4	25.6	31.7	72.6	50.9	66.3
Smaller Place	51.4	27.6	34.8	73.7	54.3	66.7
CAREER GUIDANCE OR EDUCATION						
Yes	47.8	23.7	31.9	71.3	49.0	63.2
No	50.5	26.7	33.7	71.7	53.5	66.9
COUNSELOR DISCUSSIONS						
Yes	51.6	26.0	33.5	73.8	54.3	70.5
No	47.2	25.5	30.6	69.4	49.8	60.5
Don't Remember	42.1	24.7	39.4	59.9	43.2	43.1
WORK EXPERIENCE						
Regular Job	51.1	27.6	33.3	71.6	53.1	69.9
Summer Job	49.2	25.5	33.8	71.3	52.1	63.4
Not Worked	48.3	23.6	30.5	71.8	54.4	61.0
Work Study	46.4	18.5	30.6	75.9	45.3	61.7
JOB DECISION						
Yes	49.3	25.6	33.4	72.5	50.1	65.1
No	50.4	25.9	32.5	70.2	56.2	67.3

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.42 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 119 -- SPECIALIZATION/SATISFACTION
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		32	33	34	35	36
CONNECTICUT	0.5	1.0	1.0	1.0	1.1	1.0
SEX						
Female	0.7	1.3	1.4	1.3	1.5	1.4
Male	0.7	1.4	1.5	1.5	1.6	1.5
SIZE OF COMMUNITY						
Big City	1.1	1.9	2.3	2.3	2.4	2.4
Fringe City	1.0	2.0	2.0	1.9	2.1	2.0
Medium City	1.0	1.9	2.0	1.9	2.1	2.0
Smaller Place	0.9	1.8	1.9	1.8	2.0	1.9
CAREER GUIDANCE OR EDUCATION						
Yes	0.9	1.7	1.9	1.9	2.1	2.0
No	0.6	1.1	1.2	1.2	1.3	1.2
COUNSELOR DISCUSSIONS						
Yes	0.6	1.2	1.3	1.2	1.3	1.'
No	0.9	1.8	1.9	1.9	2.1	2.0
Don't Remember	1.9	3.7	4.2	4.2	4.3	4.3
WORK EXPERIENCE						
Regular Job	0.7	1.5	1.5	1.5	1.6	1.5
Summer Job	0.8	1.6	1.7	1.7	1.8	1.8
Not Worked	1.3	2.6	2.8	2.7	3.0	2.9
Work Study	2.2	3.8	4.5	4.2	4.9	4.8
JOB DECISION						
Yes	0.6	1.2	1.3	1.2	1.4	1.3
No	0.8	1.6	1.7	1.7	1.8	1.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.43 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 211 -- SELF AWARENESS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		37	38	39	40	41
CONNECTICUT	73.2	70.3	82.3	79.5	82.5	51.3
SEX						
Female	73.9	71.6	83.9	80.8	85.2	48.0
Male	72.4	69.2	80.4	78.2	79.4	55.0
SIZE OF COMMUNITY						
Big City	67.6	65.8	79.8	75.7	75.5	41.3
Fringe City	77.4	73.8	86.3	83.0	85.4	58.6
Medium City	72.6	71.7	79.7	79.6	84.1	48.0
Smaller Place	73.8	69.2	82.8	78.9	83.2	54.9
CAREER GUIDANCE OR EDUCATION						
Yes	71.6	69.9	81.3	70.0	80.3	48.3
No	73.9	70.6	82.6	80.2	83.4	52.6
COUNSELOR DISCUSSIONS						
Yes	75.7	71.5	85.3	82.8	85.6	53.4
No	69.9	70.8	78.0	74.5	78.4	48.0
Don't Remember	63.1	59.0	71.7	69.6	69.3	45.7
WORK EXPERIENCE						
Regular Job	75.4	73.1	84.0	81.3	85.8	53.0
Summer Job	72.6	69.3	82.4	78.6	80.4	52.1
Not Worked	71.0	58.9	78.6	80.0	78.7	49.0
Work Study	67.8	63.3	77.8	75.7	80.9	41.2
JOB DECISION						
Yes	73.0	70.0	81.7	80.6	82.4	50.1
No	73.7	71.4	82.3	77.8	82.6	53.6

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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TABLE E.1.44 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 211 -- SELF AWARENESS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		37	38	39	40	41
CONNECTICUT	0.4	1.0	0.8	0.9	0.8	1.1
SEX						
Female	0.6	1.4	1.1	1.2	1.1	1.5
Male	0.6	1.5	1.3	1.3	1.3	1.6
SIZE OF COMMUNITY						
Big City	1.0	2.3	2.0	2.1	2.1	2.4
Fringe City	0.8	1.9	1.5	1.6	1.5	2.1
Medium City	0.9	1.9	1.7	1.7	1.6	2.1
Smaller Place	0.8	1.9	1.5	1.7	1.5	2.0
CAREER GUIDANCE OR EDUCATION						
Yes	0.8	1.9	1.6	1.7	1.6	2.1
No	0.5	1.2	1.0	1.0	1.0	1.3
COUNSELOR DISCUSSIONS						
Yes	0.5	1.2	1.0	1.0	1.0	1.4
No	0.8	1.9	1.7	1.8	1.7	2.1
Don't Remember	1.9	4.3	3.9	4.0	4.0	4.3
WORK EXPERIENCE						
Regular Job	0.6	1.4	1.2	1.3	1.1	1.6
Summer Job	0.7	1.7	1.4	1.5	1.5	1.8
Not Worked	1.2	2.8	2.5	2.4	2.5	3.0
Work Study	2.1	4.7	4.1	4.2	3.9	4.8
JOB DECISION						
Yes	0.5	1.2	1.1	1.1	1.0	1.4
No	0.7	1.7	1.4	1.5	1.4	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.45 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS CONTENT DOMAIN 212 -- LIFE EXPERIENCES (IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	42	43	44	45	46	47
CONNECTICUT	47.6	69.9	41.6	62.0	50.6	20.4	41.4
SEX							
Female	47.0	68.4	43.0	60.0	49.5	20.6	40.6
Male	48.3	71.6	40.3	64.1	51.6	20.1	42.2
SIZE OF COMMUNITY							
Big City	43.9	60.4	42.7	53.4	47.8	18.9	40.1
Fringe City	50.3	75.2	43.6	67.9	53.3	19.2	42.6
Medium City	49.0	74.0	40.2	64.4	50.3	24.1	40.8
Smaller Place	46.7	68.1	40.4	60.5	50.3	19.0	41.9
CAREER GUIDANCE OR EDUCATION							
Yes	46.9	69.8	40.5	58.1	53.1	17.5	42.6
No	47.9	69.9	42.3	63.5	49.6	21.5	40.9
COUNSELOR DISCUSSIONS							
Yes	48.0	72.4	41.3	62.3	50.5	20.?	41.0
No	47.5	67.8	42.7	62.0	50.4	20.9	41.0
Don't Remember	45.6	54.3	40.7	59.8	52.2	18.3	48.2
WORK EXPERIENCE							
Regular Job	48.2	71.9	41.6	62.2	50.7	21.5	41.6
Summer Job	47.0	67.2	41.9	62.9	49.9	19.3	40.8
Not Worked	48.4	72.7	43.5	59.9	51.5	22.3	40.3
Work Study	47.1	68.5	40.4	56.8	52.9	17.0	47.2
JOB DECISION							
Yes	47.4	69.2	41.7	61.7	50.5	19.7	41.7
No	48.1	71.4	41.8	62.6	50.6	21.6	40.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.46 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 212 -- LIFE EXPERIENCES
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)					
		42	43	44	45	46	47
CONNECTICUT	0.4	1.0	1.1	1.1	1.1	0.9	1.1
SEX							
Female	0.6	1.4	1.5	1.5	1.5	1.2	1.5
Male	0.6	1.4	1.6	1.5	1.6	1.3	1.6
SIZE OF COMMUNITY							
Big City	1.0	2.4	2.4	2.4	2.4	1.5	2.4
Fringe City	0.9	1.9	2.2	2.0	2.2	1.7	2.1
Medium City	0.9	1.9	2.1	2.0	2.1	1.8	2.1
Smaller Place	0.8	1.9	2.0	2.0	2.0	1.6	2.0
CAREER GUIDANCE OR EDUCATION							
Yes	0.8	1.9	2.0	2.0	2.1	1.6	2.0
No	0.5	1.2	1.3	1.2	1.3	1.1	1.3
COUNSELOR DISCUSSIONS							
Yes	0.6	1.2	1.3	1.3	1.4	1.1	1.3
No	0.8	1.9	2.0	2.0	2.1	1.7	2.0
Don't Remember	1.8	4.3	4.3	4.2	4.3	3.4	4.3
WORK EXPERIENCE							
Regular Job	0.7	1.5	1.6	1.6	1.6	1.3	1.6
Summer Job	0.7	1.7	1.8	1.8	1.8	1.4	1.8
Not Worked	1.2	2.7	3.0	3.0	3.0	2.5	3.0
Work Study	2.0	4.6	4.8	4.9	4.9	3.7	4.9
JOB DECISION							
Yes	0.6	1.3	1.3	1.3	1.4	1.1	1.3
No	0.8	1.7	1.8	1.8	1.8	1.5	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.47 -- PERFOR   CE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTE   .OMAIN 213 -- SCHOOL SUBJECT AREAS
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	48	49	50	51	52
CONNECTICUT	60.1	66.3	64.0	67.9	54.7	47.5
SEX						
Female	62.4	65.1	69.5	70.1	57.9	49.3
Male	57.6	67.5	57.9	65.6	51.4	45.6
SIZE OF COMMUNITY						
Big City	53.5	53.4	55.4	60.5	53.4	44.7
Fringe City	64.5	67.6	70.2	74.2	59.3	51.1
Medium City	59.4	69.5	62.6	67.3	50.4	47.2
Smaller Place	61.4	71.4	65.8	67.9	55.4	46.6
CAREER GUIDANCE OR EDUCATION						
Yes	57.0	67.2	58.1	63.3	51.4	44.8
No	61.3	65.9	66.4	69.7	56.0	48 `
COUNSELOR DISCUSSIONS						
Yes	62.6	68.3	66.6	71.0	57.4	49.8
No	56.3	62.8	61.2	64.0	50.4	42.9
Don't Remember	51.1	61.6	51.6	52.6	46.3	43.5
WORK EXPERIENCE						
Regular Job	62.0	70.4	65.	69.4	55.4	49.3
Summer Job	58.8	62.1	64.0	66.3	55.0	46.7
Not Worked	60.1	63.8	62.3	71.7	54.7	47.8
Work Study	54.2	65.6	58.8	57.4	51.2	37.9
JOB DECISION						
Yes	60.0	66.9	62.8	68.7	54.0	47.6
No	60.2	65.2	66.3	66.2	56.2	47.2

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.48 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 213 -- SCHOOL SUBJECT AREAS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		48	49	50	51	52
CONNECTICUT	0.5	1.0	1.0	1.0	1.1	1.1
SEX						
Female	0.7	1.4	1.4	1.4	1.5	1.5
Male	0.7	1.5	1.6	1.5	1.6	1.6
SIZE OF COMMUNITY						
Big City	1.1	2.4	2.4	2.4	2.4	2.4
Fringe City	0.9	2.0	2.0	1.9	2.1	2.2
Medium City	0.9	2.0	2.1	2.0	2.1	2.1
Smaller Place	0.9	1.8	1.9	1.9	2.0	2.0
CAREER GUIDANCE OR EDUCATION						
Yes	0.9	1.9	2.0	2.0	2.1	2.0
No	0.6	1.2	1.2	1.2	1.3	1.3
COUNSELOR DISCUSSIONS						
Yes	0.6	1.3	1.3	1.2	1.3	1.1
No	0.9	2.0	2.0	2.0	2.1	2.0
Don't Remember	1.9	4.2	4.3	4.3	4.3	4.3
WORK EXPERIENCE						
Regular Job	0.7	1.5	1.6	1.5	1.6	1.6
Summer Job	0.8	1.8	1.8	1.7	1.8	1.8
Not Worked	1.3	2.9	2.9	2.7	3.0	3.0
Work Study	2.2	4.7	4.8	4.9	4.9	4.8
JOB DECISION						
Yes	0.6	1.3	1.3	1.3	1.4	1.4
No	0.8	1.8	1.7	1.7	1.8	1.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.49 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 221 -- ABILITIES AND INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)			
		53	54	55	56
CONNECTICUT	67.4	64.2	68.0	46.0	91.2
SEX					
Female	67.9	61.0	71.5	46.7	92.6
Male	66.8	67.8	64.3	45.2	89.9
SIZE OF COMMUNITY					
Big City	62.3	58.0	60.6	42.6	88.0
Fringe City	69.5	69.2	69.2	46.2	93.6
Medium City	67.1	64.0	66.7	47.0	90.9
Smaller Place	69.2	64.3	73.4	47.4	91.7
CAREER GUIDANCE OR EDUCATION					
Yes	65.1	62.7	63.1	43.3	91.3
No	68.2	64.8	69.8	47.0	91.4
COUNSELOR DISCUSSIONS					
Yes	69.6	66.9	71.4	47.4	92.7
No	64.5	59.7	64.0	44.4	90.0
Don't Remember	57.2	56.6	51.2	38.6	82.6
WORK EXPERIENCE					
Regular Job	69.3	68.1	70.4	47.6	91.2
Summer Job	66.5	63.1	66.8	44.3	91.8
Not Worked	65.6	57.0	69.6	44.5	91.4
Work Study	64.7	61.2	57.6	45.7	94.5
JOB DECISION					
Yes	66.9	63.0	67.3	45.6	91.9
No	68.2	66.5	69.2	46.9	90.4

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.50 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 221 -- ABILITIES AND INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)			
		53	54	55	56
CONNECTICUT	0.5	1.0	1.0	1.1	0.6
SEX					
Female	0.7	1.5	1.4	1.5	0.8
Male	0.7	1.5	1.5	1.6	1.0
SIZE OF COMMUNITY					
Big City	1.2	2.4	2.4	2.4	1.6
Fringe City	1.0	2.0	2.0	2.2	1.1
Medium City	1.0	2.1	2.0	2.1	1.2
Smaller Place	0.9	2.0	1.8	2.0	1.1
CAREER GUIDANCE OR EDUCATION					
Yes	1.0	2.0	2.0	2.0	1.2
No	0.6	1.2	1.2	1.3	0.7
COUNSELOR DISCUSSIONS					
Yes	0.6	1.3	1.2	1.4	0.7
No	1.0	2.0	2.0	2.0	1.2
Don't Remember	2.1	4.3	4.3	4.2	3.3
WORK EXPERIENCE					
Regular Job	0.8	1.5	1.5	1.6	0.9
Summer Job	0.9	1.8	1.7	1.8	1.0
Not Worked	1.4	3.0	2.8	3.0	1.7
Work Study	2.3	4.8	4.9	4.9	2.2
JOB DECISION					
Yes	0.6	1.3	1.3	1.4	0.7
No	0.9	1.7	1.7	1.8	1.1

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.51 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 222 -- STEPS IN PLANNING
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	57	58	59	60	61	62	63	64	65
CONNECTICUT	56.8	65.3	13.5	3.2	69.0	76.3	66.0	73.0	63.7	80.7
SEX										
Female	58.5	67.8	12.0	2.7	71.1	78.1	69.8	74.5	67.3	83.2
Male	55.0	62.8	15.2	3.8	66.9	74.5	61.9	71.6	60.0	78.1
SIZE OF COMMUNITY										
Big City	50.0	57.8	12.3	4.2	58.7	66.2	60.2	67.5	52.2	71.2
Fringe City	60.0	67.2	14.6	2.3	77.3	82.3	65.7	73.4	71.4	85.4
Medium City	57.2	69.1	13.7	2.9	68.6	75.3	67.7	73.6	61.4	82.3
Smaller Place	58.2	65.4	13.3	3.7	69.3	79.0	68.7	76.1	66.9	81.7
CAREER GUIDANCE OR EDUCATION										
Yes	54.1	63.5	13.7	2.7	65.8	73.3	61.6	69.6	58.7	77.8
No	57.9	66.2	13.3	3.4	70.4	77.5	67.8	74.5	65.8	82.0
COUNSELOR DISCUSSIONS										
Yes	59.2	66.6	13.6	3.0	71.8	80.8	70.0	74.5	68.2	84.1
No	53.7	63.6	13.7	3.1	65.5	69.8	60.6	72.2	58.0	76.9
Don't Remember	45.8	60.1	10.9	5.1	57.3	59.4	48.8	62.7	44.1	63.9
WORK EXPERIENCE										
Regular Job	58.9	67.9	14.5	3.2	71.7	79.0	69.4	73.8	66.7	83.5
Summer Job	55.3	62.9	13.6	3.6	67.1	73.7	64.8	71.7	62.2	78.3
Not Worked	56.7	66.3	11.5	1.8	69.6	75.8	66.5	73.0	66.4	79.8
Work Study	53.9	64.1	9.7	4.9	63.7	78.6	50.8	79.0	53.6	80.4
JOB DECISION										
Yes	56.3	63.3	13.0	3.2	68.3	76.5	65.6	74.0	62.4	80.5
No	57.7	69.4	14.2	3.0	70.6	76.1	66.8	71.4	66.3	81.2

NOTE: For the full text of the demographic questions see Section III -- Sample Design.

TABLE E.1.52 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 222 -- STEPS IN PLANNING
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	57	58	59	60	61	62	63	64	65
CONNECTICUT	0.4	1.0	0.7	0.4	1.0	0.9	1.0	1.0	1.1	0.9
SEX										
Female	0.5	1.4	1.0	0.5	1.4	1.3	1.4	1.3	1.4	1.1
Male	0.5	1.5	1.1	0.6	1.5	1.4	1.5	1.4	1.6	1.3
SIZE OF COMMUNITY										
Big City	0.8	2.4	1.6	1.0	2.4	2.3	2.4	2.3	2.4	2.2
Fringe City	0.7	2.0	1.5	0.7	1.8	1.7	2.1	1.9	2.0	1.5
Medium City	0.7	2.0	1.5	0.7	2.0	1.8	2.0	1.9	2.1	1.6
Smaller Place	0.7	1.9	1.4	0.8	1.9	1.7	1.9	1.7	1.9	1.6
CAREER GUIDANCE OR EDUCATION										
Yes	0.7	2.0	1.4	0.7	1.9	1.8	2.0	1.9	2.0	1.7
No	0.4	1.2	0.9	0.5	1.2	1.1	1.2	1.1	1.2	1.0
COUNSELOR DISCUSSIONS										
Yes	0.4	1.3	0.9	0.5	1.2	1.1	1.2	1.2	1.3	1.0
No	0.7	2.0	1.4	0.7	2.0	1.9	2.0	1.8	2.0	1.7
Don't Remember	1.4	4.2	2.7	1.9	4.3	4.3	4.3	4.2	4.3	4.2
WORK EXPERIENCE										
Regular Job	0.5	1.5	1.2	0.6	1.5	1.3	1.5	1.4	1.5	1.2
Summer Job	0.6	1.8	1.3	0.7	1.7	1.6	1.7	1.6	1.8	1.5
Not Worked	1.0	2.9	1.9	0.8	2.8	2.6	2.8	2.7	2.9	2.4
Work Study	1.6	4.7	2.9	2.1	4.7	4.0	4.9	4.0	4.9	3.9
JOB DECISION										
Yes	0.5	1.3	0.9	0.5	1.3	1.2	1.3	1.2	1.3	1.1
No	0.6	1.7	1.3	0.6	1.7	1.6	1.7	1.7	1.7	1.4

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.53 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 224 -- SATISFACTION FROM WORK
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		66	67	68	69	70
CONNECTICUT	34.7	37.4	47.6	32.3	27.4	28.6
SEX						
Female	35.0	36.4	49.4	30.3	27.9	31.0
Male	34.3	38.3	45.8	34.7	27.0	25.8
SIZE OF COMMUNITY						
Big City	32.7	34.1	42.1	28.5	29.5	29.2
Fringe City	37.6	42.3	49.1	37.7	28.8	30.2
Medium City	33.5	35.8	4?.6	31.9	26.3	26.0
Smaller Place	34.5	36.7	50.2	30.5	25.8	29.1
CAREER GUIDANCE OR EDUCATION						
Yes	32.3	33.8	46.2	28.3	28.8	24.5
No	35.6	38.8	48.3	33.9	26.9	30.2
COUNSELOR DISCUSSIONS						
Yes	35.7	38.7	50.1	32.4	27.8	29.7
No	33.2	35.2	45.1	33.5	26.0	26.2
Don't Remember	30.4	34.7	34.4	26.0	30.2	26.8
WORK EXPERIENCE						
Regular Job	36.5	39.5	51.5	33.9	26.6	31.2
Summer Job	33.9	37.7	46.1	32.4	27.5	25.4
Not Worked	32.?	33.9	41.9	27.6	30.4	29.4
Work Study	31.2	27.8	41.1	33.1	29.9	24.2
JOB DECISION						
Yes	34.1	35.8	48.2	30.5	28.0	27.8
No	35.8	40.0	46.7	35.8	26.5	29.8

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.54 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 224 -- SATISFACTION FROM WORK
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		66	67	68	69	70
CONNECTICUT	0.5	1.1	1.1	1.0	1.0	1.0
SEX						
Female	0.6	1.5	1.5	1.4	1.4	1.4
Male	0.7	1.5	1.6	1.5	1.4	1.4
SIZE OF COMMUNITY						
Big City	1.0	2.3	2.4	2.2	2.2	2.2
Fringe City	0.9	2.1	2.2	2.1	2.0	2.0
Medium City	0.9	2.0	2.1	2.0	1.9	1.9
Smaller Place	0.9	2.0	2.0	1.9	1.8	1.9
CAREER GUIDANCE OR EDUCATION						
Yes	0.9	1.9	2.0	1.9	1.9	1.8
No	0.6	1.3	1.3	1.2	1.1	1.2
COUNSELOR DISCUSSIONS						
Yes	0.6	1.3	1.4	1.3	1.2	1.7
No	0.9	2.0	2.0	1.9	1.8	1.8
Don't Remember	1.8	4.1	4.1	3.8	4.0	3.8
WORK EXPERIENCE						
Regular Job	0.7	1.6	1.6	1.5	1.4	1.5
Summer Job	0.8	1.8	1.8	1.7	1.6	1.6
Not Worked	1.3	2.9	3.0	2.7	2.8	2.7
Work Study	2.0	4.4	4.8	4.6	4.5	4.2
JOB DECISION						
Yes	0.6	1.3	1.4	1.3	1.2	1.2
No	0.8	1.8	1.8	1.8	1.6	1.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	71	72	73	74	75	76	77	78	79	80
CONNECTICUT	44.4	90.6	21.6	24.4	51.8	24.3	14.2	79.7	22.5	49.6	65.0
SEX											
Female	44.8	92.4	19.7	24.8	58.6	25.6	12.3	80.1	23.1	49.1	62.8
Male	43.9	88.8	23.6	24.0	44.5	22.8	16.3	79.2	22.0	50.1	67.7
SIZE OF COMMUNITY											
Big City	41.8	85.2	25.4	25.4	50.5	20.6	12.1	73.6	18.8	44.7	61.4
Fringe City	46.6	95.0	23.0	22.1	56.7	25.1	15.8	82.1	23.2	53.4	59.4
Medium City	44.0	90.2	17.9	27.3	49.7	24.0	11.7	80.7	23.2	52.4	63.3
Smaller Place	44.5	90.9	21.1	23.0	50.2	26.5	16.6	81.0	23.9	47.1	65.1
CAREER GUIDANCE OR EDUCATION											
Yes	43.4	89.3	20.2	23.9	47.3	25.8	14.2	79.5	21.0	50.4	62.6
No	44.6	91.4	22.2	24.6	53.9	23.5	14.3	80.0	23.1	49.3	66.2
COUNSELOR DISCUSSIONS											
Yes	45.4	92.4	21.1	24.3	55.2	25.7	12.5	82.2	23.7	48.3	67.4
No	43.4	88.4	22.8	25.1	48.1	22.1	15.1	77.8	20.4	52.8	61.7
Don't Remember	38.9	83.5	21.3	21.8	34.6	18.8	18.1	63.9	20.3	49.3	57.9
WORK EXPERIENCE											
Regular Job	45.8	92.8	20.9	25.1	53.6	26.2	14.4	82.8	24.4	51.5	66.6
Summer Job	43.6	89.3	21.2	24.2	50.2	22.7	13.4	77.3	22.5	48.5	66.6
Not Worked	42.5	87.8	21.7	22.1	52.4	22.0	15.3	77.2	17.4	45.1	63.7
Work Study	45.1	95.8	28.2	28.6	52.6	26.2	18.1	78.4	21.2	51.7	50.4
JOB DECISION											
Yes	44.5	90.9	20.5	23.3	53.5	25.2	15.1	81.1	21.4	48.6	65.6
No	44.3	90.7	23.3	26.5	49.2	22.6	12.8	77.4	24.7	51.7	64.5

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E 1.56 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLCS
CONTENT DOMAIN 311 -- TRAINING PROGRAMS
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGCRY	DOMAIN AVERAGE	71	72	73	74	75	76	77	78	79	80
CONNECTICUT	0.3	0.6	0.9	0.9	1.1	0.9	0.8	0.9	0.9	1.1	1.0
SEX											
Female	0.5	0.8	1.2	1.3	1.5	1.3	1.0	1.2	1.3	1.5	1.5
Male	0.5	1.0	1.3	1.4	1.6	1.3	1.2	1.3	1.3	1.6	1.5
SIZE OF COMMUNITY											
Big City	0.8	1.7	2.1	2.1	2.4	2.0	1.6	2.2	1.9	2.4	2.4
Fringe City	0.7	0.9	1.8	1.8	2.2	1.9	1.6	1.7	1.0	2.2	2.0
Medium Cit,	0.7	1.3	1.6	1.9	2.1	1.8	1.4	1.7	1.8	2.1	2.1
Smaller Place	0.6	1.2	1.7	1.7	2.0	1.8	1.5	1.6	1.7	2.0	1.9
CAREER GUIDANCE OR EDUCATION											
Yes	0.6	1.3	1.6	1.8	2.1	1.8	1.4	1.7	1.7	2.1	2.0
No	0.4	0.7	1.1	1.1	1.3	1.1	0.9	1.0	1.1	1.3	1.2
COUNSELOR CISCUSSIONS											
Yes	0.4	0.7	1.1	1.2	1.3	1.2	0.9	1.0	1.2	1.4	1.3
No	0.6	1.3	1.7	1.8	2.1	1.7	1.5	1.7	1.7	2.1	2.0
Don't Remember	1.3	3.2	3.5	3.6	4.1	3.4	3.3	4.2	3.5	4.3	4.3
WORK EXPERIENCE											
Regular Job	0.5	0.8	1.3	1.4	1.6	1.4	1.1	1.2	1.4	1.6	1.5
Summer Job	0.6	1.1	1.5	1.6	1.7	1.5	1.2	1.5	1.5	1.8	1.7
Not Worked	0.9	2.0	2.5	2.5	3.0	2.5	2.2	2.5	2.3	3.0	2.9
Work Study	1.5	2.0	4.4	4.4	4.9	4.3	3.8	4.0	4.0	4.9	4.9
JOB DECISION											
Yes	0.4	0.8	1.1	1.2	1.4	1.2	1.0	1.1	1.1	1.4	1.3
No	0.6	1.1	1.6	1.6	1.8	1.5	1.2	1.5	1.6	1.8	1.8

NOTE: For the full text of the demographic questions see Section II) -- Sample Design

TABLE E.1.57 -- PERFORMANCE SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 312 -- RELATED ACTIVITIES
(IN PERCENT)

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	81	82	83	84	85	86	87
CONNECTICUT	44.3	14.7	78.3	24.3	20.5	64.1	29.8	78.7
SEX								
Female	44.9	14.2	80.8	22.2	19.4	66.4	29.2	82.0
Male	43.7	14.0	75.8	26.5	21.6	62.0	30.5	75.6
SIZE OF COMMUNITY								
Big City	38.6	13.0	68.3	23.0	21.3	48.1	28.3	67.7
Fringe City	47.6	14.6	83.8	20.4	24.0	73.7	33.7	82.8
Medium City	44.7	12.9	80.4	23.9	20.8	64.5	29.1	81.4
Smaller Place	44.9	15.5	78.4	29.0	16.8	66.5	27.9	80.4
CAREER GUIDANCE OR EDUCATION								
Yes	43.1	15.1	78.3	20.7	19.0	63.3	26.6	79.0
No	44.8	13.8	78.5	25.7	21.2	64.6	31.1	79.0
COUNSELOR DISCUSSIONS								
Yes	45.9	15.4	81.8	23.5	18.6	69.5	29.8	82.5
No	42.4	11.6	74.1	25.4	24.3	56.6	31.1	73.4
Don't Remember	36.7	12.8	63.1	27.0	22.2	43.6	23.3	65.2
WORK EXPERIENCE								
Regular Job	45.5	15.9	81.7	25.2	18.4	67.2	29.8	80.6
Summer Job	43.4	12.2	75.9	25.0	21.4	61.3	30.6	77.4
Not Worked	43.5	15.0	76.6	21.1	22.0	63.4	29.1	77.5
Work Study	43.7	11.6	74.6	15.7	24.0	68.9	30.1	81.1
JOB DECISION								
Yes	44.5	14.5	80.3	22.6	20.5	64.1	29.5	79.7
No	44.1	13.5	75.0	27.2	20.3	65.0	30.1	77.5

NOTE: For the full text of the demographic questions see Section III -- Sample Design

QUESTION NUMBER (SEE APPENDIX D)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	81	82	83	84	85	86	87
CONNECTICUT	0.4	0.8	0.9	0.9	0.9	1.0	1.0	0.9
SEX								
Female	0.6	1.1	1.2	1.3	1.2	1.4	1.4	1.2
Male	0.6	1.1	1.4	1.4	1.3	1.5	1.5	1.4
SIZE OF COMMUNITY								
Big City	0.9	1.7	2.3	2.1	2.0	2.4	2.2	2.3
Fringe City	0.8	1.5	1.6	1.8	1.9	1.9	2.1	1.6
Medium City	0.8	1.4	1.7	1.8	1.7	2.0	1.9	1.7
Smaller Place	0.8	1.5	1.7	1.9	1.5	1.9	1.8	1.6
CAREER GUIDANCE OR EDUCATION								
Yes	0.8	1.5	1.7	1.7	1.6	2.0	1.8	1.7
No	0.5	0.9	1.1	1.1	1.1	1.2	1.2	1.1
COUNSELOR DISCUSSIONS								
Yes	0.5	1.0	1.0	1.1	1.1	1.2	1.2	1.0
No	0.8	1.3	1.8	1.8	1.8	2.0	1.9	1.8
Don't Remember	1.6	2.9	4.2	3.8	3.6	4.3	3.7	4.1
WORK EXPERIENCE								
Regular Job	0.6	1.2	1.3	1.4	1.3	1.5	1.5	1.3
Summer Job	0.7	1.2	1.6	1.6	1.5	1.8	1.7	1.5
Not Worked	1.1	2.2	2.6	2.5	2.5	2.9	2.7	2.5
Work Study	1.8	3.1	4.3	3.6	4.2	4.5	4.5	3.8
JOB DECISION								
Yes	0.5	1.0	1.1	1.1	1.1	1.3	1.2	1.1
No	0.7	1.3	1.6	1.6	1.5	1.8	1.7	1.5

NOTE: For the full text of the demographic questions see Section III -- Sample Design

CONTENT DOMAIN 321 -- LEVEL/ABILITIES/INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		88	89	90	91	92
CONNECTICUT	46.3	52.2	45.1	56.6	59.3	18.4
SEX						
Female	46.2	49.9	46.3	58.3	58.9	17.7
Male	46.6	54.7	44.1	55.1	60.0	19.1
SIZE OF COMMUNITY						
Big City	38.3	40.8	42.1	45.4	44.2	19.0
Fringe City	49.3	52.3	49.1	61.5	66.5	17.0
Medium City	47.4	56.3	44.8	57.1	59.9	19.0
Smaller Place	48.3	56.2	44.0	59.7	63.1	18.7
CAREER GUIDANCE OR EDUCATION						
Yes	43.7	47.4	45.2	49.9	55.3	20.5
No	47.5	54.0	45.2	59.5	61.1	17.7
COUNSELOR DISCUSSIONS						
Yes	47.9	55.0	47.2	58.5	61.1	17.7
No	45.4	49.2	43.5	55.4	58.1	20.7
Don't Remember	35.9	37.5	32.8	44.7	48.2	16.2
WORK EXPERIENCE						
Regular Job	48.4	54.3	46.4	60.9	62.7	17.8
Summer Job	45.6	53.6	44.7	53.7	57.5	18.4
Not Worked	43.8	47.0	43.4	53.6	57.6	17.6
Work Study	44.0	39.1	49.1	54.8	54.4	22.6
JOB DECISION						
Yes	46.5	51.4	47.4	56.9	59.0	17.7
No	46.2	53.5	41.2	56.5	60.0	19.7

NOTE: For the full text of the demographic questions see Section III -- Sample Design

TABLE E.1.60 -- ST. DEV. OF SCORES BY DEMOGRAPHIC CATEGORY FOR 17 YEAR OLDS
CONTENT DOMAIN 321 -- LEVEL/ABILITIES/INTERESTS
(IN PERCENT)

DEMOGRAPHIC CATEGORY	DOMAIN AVERAGE	QUESTION NUMBER (SEE APPENDIX D)				
		88	89	90	91	92
CONNECTICUT	0.5	1.5	1.1	1.1	1.1	0.8
SEX						
Female	0.7	1.5	1.5	1.5	1.5	1.2
Male	0.7	1.6	1.6	1.6	1.6	1.2
SIZE OF COMMUNITY						
Big City	1.1	2.4	2.4	2.4	2.4	1.9
Fringe City	1.0	2.2	2.2	2.1	2.1	1.6
Medium City	1.0	2.1	2.1	2.1	2.1	1.7
Smaller Place	0.9	2.0	2.0	2.0	2.0	1.6
CAREER GUIDANCE OR EDUCATION						
Yes	0.9	2.1	2.0	2.1	2.0	1.7
No	0.6	1.3	1.3	1.3	1.3	1.0
COUNSELOR DISCUSSIONS						
Yes	0.6	1.3	1.4	1.3	1.3	1.0
No	0.9	2.1	2.0	2.0	2.0	1.7
Don't Remember	1.9	4.2	4.1	4.3	4.3	3.2
WORK EXPERIENCE						
Regular Job	0.7	1.6	1.6	1.6	1.6	1.3
Summer Job	0.8	1.8	1.8	1.8	1.8	1.4
Not Worked	1.3	3.0	3.0	3.0	3.0	2.3
Work Study	2.2	4.8	4.9	4.9	4.9	4.1
JOB DECISION						
Yes	0.6	1.4	1.4	1.3	1.3	1.0
No	0.8	1.8	1.8	1.8	1.8	1.5

NOTE: For the full text of the demographic questions see Section III -- Sample Design

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