

Research in School and College Personnel Services

Summaries of Unpublished Studies
September 1956-September 1958

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Foreword

RESearch in any professional field is a necessity. Equally important, however, is to have the research findings readily available for use by the professional personnel.

The purpose of this bulletin is to give an account of unpublished research studies related to school and college personnel services. The project, first of a series to be issued biennially, represents a joint effort on the part of the National Association of Guidance Supervisors and Counselor Trainers and the U.S. Office of Education.

Many people cooperated in making the research findings available. The Research Committee of the National Association of Guidance Supervisors and Counselor Trainers, the persons having charge of guidance in States and Territories, and the many individuals in colleges, State educational agencies, and local school systems, who submitted summaries, are all to be thanked for making this first publication possible.

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Studies, September 1956-
September 1958*

Introduction

EACH YEAR numerous research studies are conducted on problems in or related to school and college personnel services. Since many of these studies go unpublished, the results are all but lost to a large segment of people concerned with the improvement and operation of the services.

The U.S. Office of Education was requested by the National Association of Guidance Supervisors and Counselor Trainers to cooperate in collecting and publishing biennial summaries of unpublished research in the field of school and college personnel work. The present bulletin carries summaries of research studies completed between September 1, 1956, and August 31, 1958.

The publication of these summaries can serve at least two purposes: First, they can be used to bring about some improvements in school and college personnel services, for such improvements depend to a large degree on the extent to which research conclusions find their way into operational programs. Second—and perhaps more important—they can stimulate, and serve as a base for, further research studies, particularly those in graduate programs.

The present summaries should be considered primarily as a source of reference, because brevity was a major consideration. This was deemed a justifiable economy, for the complete reports are available on loan basis from the libraries of the various educational agencies or from the other sources listed with the name of the author and the title of the study.

Method of collection.—Nationwide coverage in the collection was assured by requesting the person in charge of guidance services in each State and Territory to serve as coordinator for his geographical area. Forms for reporting research summaries and instruction sheets were provided for the coordinators. They in turn made them available to persons and agencies in the State or Territory who would have knowledge of unpublished research materials. For the most part, these forms were distributed to institutions of higher education, State departments of education, local school systems, and professional organizations.

Types of materials collected.—The definition established for “unpublished” research was that it should include all research not generally accessible through professional journals, books, monographs, and other publications covered by standard indexing services. Since findings pertinent to school and college personnel services would be drawn from various disciplines, the instructions did not attempt to identify subject areas in which the research might have been conducted. Rather, with school and college personnel services being an applied field, collection of all research studies was encouraged, which would have some bearing on this phase of education. For future collections it is hoped that the base can be broadened to include research in a greater variety of subject areas.

Classification of findings.—Because of the diversity of subjects covered in the studies, any classification of the present summaries would have resulted in a certain amount of overlapping. It was therefore decided that the guiding principle should be simply for the reader's convenience. On this basis a major breakdown was adopted as shown in the contents, using terms familiar to those concerned with school and college personnel services and problems.

Summary of Studies¹

Activities

HOUSON, WILFIE ERVIN. A Study of Selected Student Leaders in a Liberal Arts College. (Master's, 1958, North Carolina College at Durham.)

Director of Study.—Ray Thompson.

Problem.—(1) To secure specific information about leaders as identified in selected professional literature. (2) To collect and interpret specific information about selected student leaders during the 1957-58 academic year at North Carolina College. (3) To present conclusions and recommendations based on the data examined.

Procedures.—A quantitative, descriptive survey employed the following procedures and techniques: (1) Examined selected professional literature pertinent to the study of student leaders; (2) consulted the chairman of the student welfare committee, the dean of men, the dean of women, the president of the student government, and the athletic coaches for lists from which 49 leaders were selected; (3) devised a student leader data sheet; (4) consulted the college counselor and certain other faculty members for opinions on the data sheet, revised and mimeographed; (5) supplemental and validated data obtained from college personnel records, by interviews and questionnaires; (6) interpreted and recorded the collected data in textual and tabular forms.

Major Findings.—The average leader in this study was: (1) 21.2 years old; (2) an upper-classman; (3) unmarried; (4) a campus resident; (5) experienced in summer part-time

jobs; (6) without physical handicap; (7) from a home having both parents, who had at least a high school education and held jobs in unskilled occupations; (8) above average in school ability and achievement; and (9) active in school, social, and community affairs. A majority of the student leaders designated "college" as their objective beyond high school and expressed varied preferences for college major and minor areas, and for occupational objectives. Most student leaders were persistent in adhering to their original life goals as stated in high school.

LENFESTEY, FREDERICK THAMES. The Degree of Participation in Summer Activities in Relation to the Presence of Certain Personality Characteristics. (Ed. D., 1956, University of Florida, Gainesville.)

Director of study.—Charles R. Foster.

Problem.—To determine personality traits among seniors at a teacher education institution who have participated extensively in non-academic activities recognized by the institution as compared with the personality traits of seniors in the same institution who have not participated to any great degree.

Procedures.—A total of 101 students from the 1954-55 senior class at Georgia Teachers College were chosen as the sample. Data: Minnesota Multiphasic Personality Inventory, Otis Self-Administering Test of Mental Ability, Personal Questionnaire (the author's), and college records. Degree of participation judged by club sponsor or officer. Individual personal interviews. Correlation between t-score of MMPI, degree of participation in hours, Otis IQ, grade-point average, percent of college expenses earned by student. Leader and non-leader factors also correlated.

Major Findings.—No significant correlations between degree of participation and mental health. Degree of participation and grade-point average correlated at 1-percent level of significance. No significant connections between participation and intelligence or participation and percentage of college expenses

¹ Although the greatest number of studies summarized in this publication have been in partial fulfillment of degree requirements, others have been undertaken independently of such requirements. This latter group contains studies whose authors may or may not be identified in the summary with any specific higher education institution.

earned. Leader group showed significant tendencies toward depression at 1-percent level of significance.

LEWIS, CHARLES L. and COMMITTEE. Fraternity Expansion Report. (1958, University of N. Dak., Grand Forks.)

Director of study.—

Problem.—To determine need, advisability, and procedures for expansion of a fraternity system.

Procedure.—Local study of history, enrollment, and related data on development of the University of Dakota's fraternity system. Procedural survey of several institutions.

Major Findings.—Membership growth in fraternity system is at or approaching maximum. Percent of male enrollment belonging is decreasing. Fraternity chapters seem to be organized but constant review is needed. Criteria for selection and procedural statement are incorporated in the plan.

MARX, GEORGE L. Analysis of the Differential Academic Performance of the Pledge Groups of 19 Men's Social Fraternities at the State University of Iowa. (Master's, 1958, State University of Iowa, Iowa City.)

Director of study.—Kenneth B. Hoyt.

Problem.—(1) To determine whether significant differences existed in the academic achievement of the pledge groups of the social fraternities at the State University of Iowa when the effect of ability was eliminated by statistical means. (2) To investigate certain factors which might contribute to differences in academic performance.

Procedures.—High school grade-point average and the State University of Iowa composite placement test scores were obtained for each of the 199 individuals in the sample. By an analysis of covariance, the effect of ability, as measured by grade-point average and placement test scores, was eliminated. The multiple analysis of covariance technique was then used to determine whether any remaining differences in the achievement of the groups were significant. A series of interviews was conducted with fraternity presidents, scholarship chairmen, and pledge class presidents to ascertain whether certain relationships could be shown between the chapters' pledge training program and/or scholarship program and mean adjusted grade-point average.

Major Findings.—Differences, significant at the 1-percent level of confidence, were obtained in the academic achievement of the groups when the effect of ability was eliminated. The correlation coefficient for the scholarship program and the mean adjusted grade-point average was .25. The correla-

tion coefficient of the pledge training with the mean adjusted grade-point average was .07. The multiple correlation of these two variables with the mean adjusted grade-point average was .27. Differential performance exists between the pledges of various chapters accountable to factors other than ability. Differences in programs at scholarship training for pledges do not seem to explain differential achievement among pledges in various fraternities.

MILES, MERLE M.—A Study of the Policies, Practices and Conditions Affecting Fraternity Scholarship. (Ed. D., 1957, University of Southern California, Los Angeles.)

Director of study.—Earl F. Carnes.

Problem.—To ascertain statistically the effectiveness of policies, conditions, and practices of the national fraternities, colleges and universities and the local fraternity chapter in high scholarship.

Procedures.—High and low achieving fraternity chapters were selected from data comparing them with the all-men's average on their respective campuses. Colleges and national fraternity organizations were selected to represent high and low achieving fraternity chapters and their opinions were polled. Three questionnaires containing 66 issues for study were constructed and sent to 61 national fraternities, 62 colleges and universities, and 421 local chapters over the United States.

Major Findings.—(1) High scholarship national fraternities are high in scholarship, in part, because they emphasize the values of high scholarship and require minimum standards of achievement among their chapters and members. (2) High scholarship colleges are high in fraternity scholarship, in part, because they set minimum scholastic standards for fraternities and defer student membership in these groups until standards are met. (3) High scholarship fraternity chapters are high in scholarship, in part, because they select members with better scholarship to begin with; have a tradition for high scholarship that is perpetuated through the practices of their members without the use of regulations; have an attitude that scholarship has intrinsic worth rather than relying on extrinsic rewards; have capable leadership within their own group; and tolerate but often find outside supervision dispensable in their efforts to improve the scholarship of their members.

PACKAN, MAE H. A Study of the Extra Expenses of Being a Senior at Coventry High School. (Master's, 1957, University of Akron, Akron, Ohio.)

Director of study.—Mabel M. Riedinger.

Problem.—To ascertain the cost to seniors of

extracurricular activities and supplementary school supplies and the attitudes of the parents and seniors toward these extra costs.

Procedures.—The study was limited to the senior class of Coventry high school in the Summit county school system, a 4-year high school in a suburban community of predominantly middle-class homes. The procedure involved three major steps: First, the seniors, 59 boys and 55 girls, submitted bimonthly accounting of their extra expenses: athletic contests, assembly programs, club memberships, plays, and musical shows, dances, class trips, the yearbook, the school newspaper, class parties, athletic equipment, and commencement activities, such as personal name cards, announcements, senior pictures, caps and gowns, the class banquet and the junior-senior formal dance. Second, by questionnaire, parents of seniors were asked to indicate their opinion of the cost of extracurricular activities and the extent of the activities program. Third, seniors' opinions were obtained of the costs.

Major findings.—Average yearly extracurricular expenses are \$109.80. A senior may spend as little as \$26.44, but he will not be a happy, active member of the group. College preparatory students spend proportionately far more than other students, and boys and girls share the costs almost equally. Parents and seniors are satisfied with the scope of the activities program. They feel that extracurricular costs, such as those for announcements and name cards, are excessive partly because of tradition; but they offer no effective means of reducing extra expenses.

PALMER, JOHN T. A Comparison and Empirical Analysis of the Attitudes of Certain Student Groups on Selected Issues Related to University Life (Ph. D., 1957, University of Southern California, Los Angeles.)

Director of study.—Earl F. Carnes.

Problem.—To determine differences of attitudes which might be associated with affiliation or nonaffiliation with social fraternities.

Procedures.—Fraternity and nonfraternity groups of students at all class levels were systematically sampled on the campus of the University of Southern California, by an attitude scale that dealt with 22 selected issues related to university life. Differences between the two groups and among the various classes were studied by means of the chi square.

Major findings.—Although some differences of attitudes were found between fraternity and nonfraternity students, they grew slowly until the senior year, when the samples differed significantly on 16 of the 22 issues among all class levels. Fewer differences of attitudes were found among the fraternity group and occurred at a much slower pace than among the nonfraternity group.

PICKETT, JULIA LUCILLE. A Junior High School Club Program. (Master's, 1957, San Diego State College, Calif.)

Director of study.—C. M. Gjerde and James M. Linley.

Problem.—To investigate the school club program at one junior high school in the city of San Diego through the following questions: (1) What is the extent of student participation in school-sponsored clubs? (2) Are sponsored clubs outside of the school's jurisdiction serving a large group of students? (3) Is there any relationship between the two foregoing groups? (4) Why do some students not affiliate with any school-sponsored clubs? (5) Are some students seeking membership in an outside group or secret club that is unsponsored by the school, an individual adult, or an organization? (6) What are some of the causal factors that affect membership in school-sponsored clubs?

Procedures.—A questionnaire was administered to 9th-grade students through their English classes to elicit information in the areas of (1) school-sponsored clubs, (2) out-of-school or agency-sponsored clubs, and (3) out-of-school groups not affiliated with a community agency or club. The student responses to each part of the questionnaire were tabulated and presented in separate tables for comparison.

Major findings.—More students participated in school clubs than in out-of-school clubs, and girls participated in both more than boys did. Above-average scholarship and citizenship grades were reported by the majority of school club participants and officers. The major participation in school clubs was in athletics; in out-of-school clubs, and church activities. Publicity and economic demands played a significant part in club activity.

SITTLER, O. L. Description of Student Success by Participating and Nonparticipating Students. (Master's, 1957, The Ohio State University, Columbus.)

Director of study.—H. B. Pepinsky.

Problem.—To describe student success as measured by interview responses of participants and nonparticipants in campus activities.

Procedures.—Thirty-three students engaged in major activities and 33 students not so engaged were participants. These two groups were matched on point-hour ratio, residence, college, year in school, and sorority affiliation. Consequently, it was assumed that much variation in responses could be attributed to the variable of activity participation. The data were collected through personal interviews, four questions being used to elicit descriptions of student success and responses were recorded verbatim. Five

Judges then sorted the descriptive statements from a random sample of interviews into seven general categories. A frequency count was made of the number in each group who used each statement, and the number in each group who fell in each general category of statements. The chi-square test was applied to determine any significant differences between the numbers of participants and non-participants.

Major Findings.—The participants responded significantly more often to 14 statements in the 7 categories than did the nonparticipants. Participants and nonparticipants have an essentially similar concept of student success; the description of the successful student fits the pattern of the highly conforming, "other directed" person.

WELTY, MARY L. A Study of Time Utilization of High School Seniors in Relation to Activity Participation and Scholastic Achievement. (Master's, 1958; Claremont Graduate School, Claremont, Calif.)

Director of study.—Donald McNassor.

Problem.—To determine, among students who participated extensively in school activities, whether time utilization was a factor in differentiating between those who achieved scholastically at a level commensurate with their academic potential and those who achieved scholastically well below their potential. To determine how activity participation affected academic performance of high school seniors.

Procedures.—Questionnaire developed to select those senior students who participated most widely in school activities. **Group selected:** 20 boys and 21 girls. **Method of data collection:** (1) Individual logbooks in which students recorded daily use of time, on hourly basis for 21 days. (2) School records consulted for students' grade averages, IQ's, and composite scores on Iowa Tests of Educational Development. **Analysis of data:** All data were organized in both tabular and graphic form. Correlations between variables computed using Pearson product-moment method and first-order partial correlation formula.

Major Findings.—The participants represented a group with above average intelligence and general ability, having a mean IQ of 111.9 and a mean percentile score of 76.58 on the Iowa Tests of Educational Development. The scholastic achievement of the group in school subjects during period of the study was above average, with 68 percent achieving average of "B" or better. The group spent an average of 9.5 hours per week studying, and mean of 16.7 hours per week in activities.

On the basis of evaluation of time utilization, no central tendency was evident. Statistical findings presented no conclusive evidence of a substantial relationship between

time organization and scholastic achievement or between scholastic achievement and amount and extent of activity participation.

Adjustment

AINSWORTH, LABAN L., JR.—An Exploratory Study of the Academic Achievement of Arab Students. (Ph. D., 1957, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate certain factors associated with the academic achievement of Arabian students at the University of Texas, Austin.

Procedures.—The investigation utilized an identification blank, an Arabic translation of the Brown-Holtzman Survey of Study Habits and Attitudes, a revision and translation into Arabic of Villarreal's Test of the Aural Comprehension of English for Native Speakers of Spanish, the Cattell Culture Free Test of Intelligence and the Diagnostic Reading Test, Survey Section. Both the CFTI and the DRT were administered as called for in the manuals. The criterion measure was grade point average based on marks made at The University of Texas. The total sample was classified by GPA's in high, middle, and low groups. Statistics used included Pearson's Multiple r, t-tests, Pattern Analysis Discriminant Analysis, and Chi Square.

Major Findings.—(1) There was no significant differences among the Culture Free Test scores of the three achievement groups. There were no significant differences either among these groups in their ability to understand spoken English (as measured by the Arabic version of the TAC) but their scores were related to length of time they had spent in the United States. (2) DAT vocabulary, total comprehension and total scores were significantly related to the students' academic achievement, but story comprehension and rate of reading were not. (This group read very slowly and covered relatively small units of the tests—extension of time might have improved prediction). (3) There was a significant relationship (the highest found) between SSHA scores and academic achievement. (4) Pattern Analysis and Discriminant Analysis supported the general findings. (5) Item analysis of the DRT and SSBA responses provided an understanding of measures which would make it possible to devise more effective tools for the special needs of the particular atypical students composing the group under study.

BERRY, MICHAEL K. An Analysis of Personal-Social Problems of College Fresh-

men. (Master's, 1958, University of Scranton, Scranton, Pa.)

Director of study.—Paul Lilly.

Problem.—A survey of the personal and social problems found in the freshman class (1957-58) at Kings College, Wilkes-Barre, Pa.

Procedures.—Survey, using the Mooney Problem Checklist. Out of the total freshman class of 205 students, 183 completed the checklist.

Major Findings.—The group, per student, checked 23.9 items as worthy of attention and 5.1 items as representing serious problems. The problem area considered most troublesome was "Adjustment to College Work"; least troublesome, "Curriculum and Teaching Procedure." "Personal-psychological Relations" was also considered a serious area. The average number of problems marked by the science students and the humanities students was significant at the 1-percent level. There was a significant difference at the 5-percent level between the average number of problems marked by sons of professional fathers and the average number marked by sons of semi-skilled fathers.

BELL, VIRGINIA D. Relationship of Parental Attitudes and Their Children's Behavior in the Ninth Grade at Euclid Shore Junior High School. (Master's, 1957, John Carroll University, University Heights, Ohio.)

Director of study.—Walter S. Nozal.

Problem.—(1) To tap by questionnaire the following psychological climates in the home: autocratic, democratic, or laissez-faire; (2) to construct a checklist for homeroom teachers and class teachers to indicate pupil's responsiveness to directions and free time use; and (3) to ascertain relationships present.

Procedures.—The survey was limited to 100 girls and boys in the 9th grade at Euclid Shore Junior High School. A questionnaire for the parents, and checklist for homeroom and class teachers, as above described, were used.

Major Findings.—The majority of the 100 students were categorized as coming from homes having a democratic atmosphere, with parental control neither too strict nor too lenient. Of these, two-thirds were rated by teachers as well adjusted. Next most frequently found home climate was the laissez-faire (20 cases), including a higher percentage of problem cases than the democratic, with only 2 of the 20 rated as well adjusted. There were too few cases from autocratic homes for any clear conclusion.

BENTZ, CLAUDE M. A Study of Factors Related to Adjustment to Blindness. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—Cecil O. Samuelson.

Problem.—To investigate factors of developmental, educational, and sociological history of adult blind to ascertain some factors related to adjustment to blindness.

Procedures.—The Edward Fitting Adjustment Scale was administered to 62 blind adults who met the criteria of residence, sex, and age. The 15 with the highest scores and the 15 with the lowest were selected for comparisons and the investigator personally administered the Verbal Scale of the Wechsler-Bellevue Intelligence Test.

Major Findings.—The well-adjusted blind group was younger and had become blind at a younger age than the poorly adjusted, and the latter had been blind for a greater number of years. The two adjustment groups were not significantly distinguished by cataracts, disease, heredity, or unknown causes; but accidents and war injuries were distinguishing causes significant at the 5 percent level. A greater number of the poorly adjusted had lost sight through accidents, and a greater number of the well adjusted through war injury. More of the poorly adjusted than the well adjusted had some disability in addition to blindness.

More of the well adjusted were working full time, and more of the poorly adjusted part time; differences were significant at the 1-percent level. Other differences significant at the 5-percent level: more of the poorly adjusted were not working at all, and more of the well adjusted were in school. Differences in education were significant at the 1-percent level, the well adjusted having more education.

In general, the results support the use of the Edwards Fitting Adjustment Scale for classifying the blind into well and poorly adjusted groups.

BLOOM, VIOLA. A Study of the Various Characteristics of Junior High Students in the 75-90 I.Q. Range. (Ph. D., 1958, Western Reserve University, Cleveland, Ohio.)

Director of study.—Marvin Powell.

Problem.—To find out more about the characteristics of the 75-90 I.Q. junior high school students as compared to a group of 95-105 I.Q.

Procedures.—Achievement, temperament, I.Q. testing. Analyses of attendance, grades, teacher comments.

Major Findings.—The schools seem to do little for this 75-90 group. They are poorer students than would be expected, more maladjusted, etc.

BOLSTER, RICHARD A. Effect of Two Teaching Climates on School Grades of

Fatherless Boys. (Master's, 1958, San Diego State College, Calif.)

Director of study.—Helen Prouty.

Problem.—To ascertain whether any general patterns of responses to certain types of teachers existed among boys from homes in which the natural father was absent.

Procedures.—The 44 boys for the sample group were selected on the basis of I.Q.'s in the range of 104 through 118, from homes where the natural father was absent for reasons other than military duty or illness. The boys in the sample group were matched, student for student, with three control groups of the same size: one for mathematics, one for English, and one for social studies. Six counselors were used to classify the teachers' opinions as to whether the teachers were "subject-centered," "guidance-centered," or neither. Scholarship and citizenship grades of the sample and control groups were compared and the responses to the different types of teachers were analyzed.

Major Findings.—In no case was a difference of responses found within or between groups which could with any certainty be considered significant. There actually were no significant differences in responses studied: cause of absence, length of absence, nationality of the mother and attitude of the mother all may have had some bearing on the responses.

BONNEY, WARREN C. An Investigation of Factors Associated With Changes in Inventoried Interests During the First Semester of College. (Ph. D., 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate changes in the inventoried interests of freshmen during their first semester of college as of assistance to college counselors. Subjects were 133 men who entered as freshmen at Texas Agricultural and Mechanical College, College Station, in September 1955.

Procedures.—The factors under study were academic grades, vocational guidance, academic attitudes, and major field of study. The guidance and n-guidance groups were determined by registration in a formal group-individual guidance program, and the California Occupational Interest Inventory (OII) was given during the first week of classes. The OII was administered again during the final week of the semester, along with the Brown-Holtzman Survey of Study Habits and Attitudes (SSHA). Grade-point averages and choice of major were determined. The principal statistics used were analysis of variance, Pattern Analysis (Osgood and Souci), analysis to determine critical OII scales for various major fields, and item analysis.

Major Findings.—(1) The field scales of the OII demonstrated reliability and validity

comparable to that reported for other well-known measures of expressed interest. The type scales contributed little, and the level scale was insensitive in this setting. (2) The student's academic grades, and whether or not he had received vocational guidance, did not, when taken singly, show direct relationship to changes in scores on the OII from pretest to post-test. A significant but obscure interaction was found, however, with grades, guidance, and change in OII scores. (3) The SSHA scores were not significantly related to changes in OII scores during the semesters. (4) Highly significant differences were found among major fields for changes in scores on those scales which had been established (with reference groups) as appropriate to the student's choice of majors. (5) There were considerable differences in the degree to which occupations associated with the various academic fields could be stereotyped by students on entering college. Patterns were sharp and clear for students who began study in the engineering field, but much less distinct for students who entered the business field.

BRADY, FAY A. S. A Study of the School Achievement of Migrant and Permanent-Resident Students. (Master's, 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To provide a comparison between the school achievement of 6th-grade children whose families followed the migratory labor pattern and of comparable 6th-grade children whose families remained at home the year around. All subjects were Latin American boys and girls who completed the 6th grade in Austin, Tex., elementary schools during the session 1956-57.

Procedures.—Eighty-seven migrant children were selected and matched by Total IQ from the California Mental Maturity Test and by residence area with permanent-resident children. The two groups were compared in terms of language and nonlanguage IQ's, days of attendance during elementary school, scores on the California Reading and Arithmetic Tests and the Metropolitan Achievement Test, and grades made in school. The principal statistics used were *t* and *F* tests for independent samples and the *t* test for mean differences.

Major Findings.—(1) The nonlanguage IQ's of both migrant and permanent-resident children were much higher than their language IQ's. The mean nonlanguage IQ's of migrant children were significantly higher than those of permanent-resident children. The mean language IQ's of permanent-resident children were higher than those of migrant children. (2) Migrant children had spent significantly fewer days in school than permanent-resident children throughout the six grades, the differences being, on the average, between 30 and 40 schooldays. The permanent-resident chil-

dren, however, had rather poor attendance records. (3) Migrant and permanent-resident children did not differ significantly with respect to scores on the California Reading Test, the California Arithmetic Test, and the Metropolitan Achievement Test. (4) Migrant and permanent-resident children did not differ significantly with respect to marks made in 10 school subjects or in the teachers' estimates of reading level. (5) Migrant males tended to be superior to migrant females in terms of most test scores and school marks.

BRUSH, HELEN NELSON. A Study of Academic Performance and Perseverance of Transfer Students at the University of Denver. (Ed. D., 1956, University of Denver, Colo.)

Director of study.—D. D. Feder.

Problem.—(1) To discover the magnitude of the student transfer problem and to trace the development of concern with it. (2) To gather pertinent information on an experimental group, and to point out implications of transfer for admission policies and for other aspects of student personnel services.

Procedures.—Statistical correlates of academic standings of transfer and "native" students' 0.5 percent level adopted for significance. Over 1,000 new students and 345 transfer students studied longitudinally beginning with 1953-54 admissions records.

Major Findings.—(1) Transfer students are more likely to be older, to be married veterans, to be males, to be from outside the state; and less likely to carry full loads. (2) The study evolved no configuration formula (transferred from, education of parents, etc.) useful in effectively predicting persistence of transfer students. (3) Items which showed significant differences between students who dropped out and those who persevered to graduation were not, generally, the same items which differentiated good and poor students. (4) There were some significant differences between continuers and noncontinuers. Continuers generally were single, had attended only one previous college (usually a liberal arts school), were about the junior class level, and they engaged in extra activities while at the University of Denver.

CASH, W. L., JR. Mental Health Characteristics of Negro Youth in Texas. (1957, Prairie View Agricultural and Mechanical College, Prairie View, Tex.)

Director of study.—W. R. Banks.

Problem.—To determine the level of personal and social adjustment of Negro youths in Texas and whether they differ significantly from Texan youths as a whole in their level of personal and social adjustment as measured by Cooperative Youth Study Problem and Attitude Scales.

Procedures.—The subjects were 1,849 Negro youths, both sexes, and a sample of 1,000 youths drawn carefully from the Cooperative Youth Study population of 1,200 cases in grades 9 through 12, inclusive, in two different Texas communities. The following hypotheses were tested: (a) There is no significant relationship among the 14 CYS Problem and Attitude Scales; (b) there is no significant difference between Negro youth and youth in Texas as to their level of personal and social adjustment.

Major Findings.—Negro youth and the CYS sample group differed significantly in inter-scale relations. In each instance where the two groups differed, the coefficients of inter-correlation for the Negro group were larger and showed a tendency for this group to be less well adjusted. These coefficients of intercorrelation influenced markedly the obtained *r*'s of the CYS sample population. The two groups differed significantly on the following CYS Scales: (1) Orientation to Society, (2) Authoritarian Discipline, (3) Family Problems, and (4) Resentment of Family Life Style. Negro youth showed a tendency toward poor adjustment on these scales.

COLE, JOSEPH W. Movement Between Curriculum Fields at the College Level. (Ed. D., 1958, Harvard University, Cambridge, Mass.)

Problem.—To study effect of migration movement between curriculum fields at the college level on the multivariate test score distribution problem for college students classified by curriculum groups.

Procedures.—Sample of 1,600 male University of Rochester students, 1948-53. Discriminant analysis and the contour concept were basic statistical tests employed on data analysis.

Major Findings.—(1) About 42 percent of degree recipients at the University of Rochester completed degree requirements in a field other than their first choice. Among withdrawals, only about 19 percent had made changes in their field of concentration at the time of withdrawal. (2) In general, the data support the hypothesis that "multivariate test score distributions for groups of individuals are more homogeneous when the groups are defined in terms of the educational or vocational goal which an individual has realized than they are when the groups are defined in terms of an individual's original choice of goal." (3) Using as a frame of reference the definition of man as adopted for purposes of this study,¹ some of the outcomes are as follows:

¹ For the purposes of this study a man was considered as in the peripheral region of a group of which he was a member if his contour score was greater than 50; and in the central region of a group if his contour score was less than 50.

lows: (a) The most common pattern of migration is from one of the science-oriented fields of concentration groups into one of the bachelor of arts fields (English, history, or psychology); (b) the distribution of centour scores of reality-classified groups is rectangular (this by the definition of the centour score was expected to hold); (c) the distribution of centour scores of aspiration-classified groups is nonrectangular, with the peripheral regions found to be more densely populated than the central regions; (d) the ratio of change from aspiration groups is greater for those individuals located in the peripheral region of multivariate test-score distributions than for those in the central region; (e) the direction of change from aspiration groups is more often than not towards the centroid of the reality group; (f) the ratio of change is greater for individuals whose aspiration and predicted classifications are different than for individuals whose aspiration and predicted classifications are the same; (g) the ratio of change is not greater for individuals who satisfy the requirements for membership in several groups than for those who satisfy the requirements in fewer groups or in one group; (h) the number of correct classifications based on predicted group membership is greater than is expected by chance.

CONABOY, ROSEMARY. The Iowa Tests of Educational Development as an Aid to Curriculum Adjustment in the South Scranton Junior High School. (Master's, 1957, Marywood College, Scranton, Pa.)

Director of study.—Edward Tomaszewski.

Problem.—To determine the value of Iowa Tests of Educational Development as an aid to curriculum adjustment in the South Scranton Junior High School.

Procedure.—Initiation of a comparison of South Scranton tests averages with national and Pennsylvania norms in the Iowa tests.

Major Findings.—(1) Science, as a separate subject, to be taught in 7th and 8th grades; (2) mathematics changed from an elective to a required subject in 10th grade; (3) a language elective to be made available in all courses; (4) the serious weakness seen in creative writing to be adjusted by special work in that area.

The Iowa Tests of Educational Development are seen to be a valuable aid to curriculum adjustment and revision. They point up the strengths and weaknesses of courses presently offered, and eliminate pressure for any specific subjects. The test scores point out problems, thus giving the faculty and supervisors concrete guides as to needed curriculum changes.

DAVIS, CLIFTON E. A Study of the Relationship of Socioeconomic Status to Intelligence and Scholastic Achievement of

High School Students. (Master's, 1958, ———.)

Director of study.— ———.

Problem.—To determine the degree of association among the following variables for 120 boys and girls in grades 10 through 12 enrolled in the Booker T. Washington High School, Shreveport, La., during the 1957-58 academic year: Socioeconomic Status, California Mental Maturity and Achievement Measures, and scores earned on the Iowa Educational Development Test.

Procedures.—The following measures were used: Sims Socioeconomic Score Card, California Achievement and Mental Maturity Tests, Iowa Educational Development Test, and grade-point ratios. The relationships among the variables were stated and tested as null-hypotheses. The 1-percent and 5-percent levels of confidence were employed for rejecting an hypothesis.

Major Findings.—(1) A significant relationship was found between Socioeconomic Status and (a) scores on the California Achievement Test, (b) grade-point ratio, (c) scores on the California Mental Maturity Test. (2) A significant relationship was found between the Socioeconomic Status of pupils in grades 10, 11, and 12, and their scores on the Iowa Educational Development Test.

DUNLOP, JOHN P., JR. A Study of the Relationship Between Level of Maturity and Self-Estimation of Aptitudes. (Master's, 1957, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To study the relationship of maturation to the self-estimates made by high school students of their probable scores on the Differential Aptitude Tests. The experimental population consisted of boys and girls in the 10th and 12 grades of the Sequin (Tex.) high school.

Procedure.—A method was developed for the estimation of scores expected on each of the eight tests of the DAT, involving use of stanine units and guide sheet which showed, by percentage and number, what each stanine meant in terms of position in the groups. Stanines based on estimates were compared with those derived from actual DAT scores; also measures of accuracy of estimation and direction of error were established. Statistical techniques used included Pearson r , Fisher z , and t -tests of differences between means.

Major Findings.—(1) The self-estimates made by high school students of certain aptitudes were fairly well correlated with scores on tests of these aptitudes. Mean r 's (by z transformation) of approximately .50 were found with the academically oriented Verbal Reasoning, Numerical Ability, Spelling, and Sentence Tests. Estimates were much less correlated with scores in the case of special

aptitudes such as Abstract Reasoning, Space Relations, and Clerical Speed and Accuracy. The mean r was not significantly different from zero for the Mechanical Reasoning test.

(2) No consistent relationship was found between age and accuracy of self-estimation; 12th-grade females were more accurate than 10th-grade females, but 10th-grade males were more accurate than 12th-grade males. When accuracy of estimation and direction of error were studied, only one significant t was found in 32 comparisons of groups in the 10th and 12th grades. (3) Females tended to be more accurate than males, as measured by the Accuracy of Estimation score, but t 's were significant only for Verbal Reasoning and Numerical Ability in the 12th-grade group. (4) Several significant sex differences were found with the Direction of Error score. These occurred with sex-biased scales such as the Numerical Ability, Mechanical Reasoning, Spelling, and Sentence tests. Males overestimated and females underestimated male-biased scores, while females overestimated and males underestimated female-biased scores.

FERRARO, C. D. Age and Marital Differences in Degree of Conflict in Various Areas of Psychological Adjustment in Teachers. (Ph. D., 1958, Western Reserve University, Cleveland, Ohio.)

Director of study.—Marvin Powell.

Problem.—An age study of teachers' responses to emotional areas. To determine age trends and differences as well as marital differences.

Procedures.—Four-hundred teachers were given a word association test and reaction time was the index of disturbance in eight areas of adjustment. They were equated for educational background, etc. Age trends from 20–60 were presented and differences between single and married females were determined.

Major Findings.—Single teachers were generally more upset in various areas with increasing age, but both single and married showed an increase in conflict.

GAILEY, VIRGINIA VARNEY. The Guidance Needs of Girls in the San Diego County Juvenile Hall. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Phelon J. Malouf.

Problem.—To study areas of guidance needs of girls in the San Diego County Juvenile Hall. The objectives were (1) to obtain a comprehensive description of girls in a juvenile hall, and (2) to identify some areas of guidance needs of these girls.

Procedures.—The study included a survey made, during the 1954–55 and 1955–56 school years, of 300 girls selected at random from the San Diego County Juvenile Hall in

San Diego, Calif. Background data pertaining to the residence, ethnic derivation, age, grade in school, reason for referral, disposition, repeaters, and home situation were secured from entry cards made out at the time the girls entered the Hall. The principal task was to identify their guidance needs in seven problem areas: (1) emotional, (2) educational, (3) family, (4) social, (5) economic, (6) vocational, and (7) health. This was done by getting the girls' responses to a checklist of 357 wishes patterned after Rath's and Metcalf's inventory, the "Wishing Well," and the Inventory of Personal Opinions (unreleased to the public and in the process of development by the San Diego Naval Retraining Command). To supplement and validate the data, contradictory wishes were inserted into the checklist and interviews were held with 26 girls.

Major Findings.—(1) Thirty-five percent of all responses were in the emotional area; 22 percent in the family area; 12 percent in the educational area; 10 percent in the social area; 10 percent in the economic area; 7 percent in the vocational area; and 4 percent in the health area. (2) Of the total 357 wishes in the "Wishing Well," the 11-year-old girls checked, on the average, 128.5 wishes; the 12-year-olds, 158.9; the 13-year-olds, 141.0; the 14-year-olds, 118.4; the 15-year-olds, 108.0; the 16-year-olds, 118.1; and the 17-year-olds, 94.0. The average total number checked was 117.0 wishes. (3) Only seven girls responded to contradictory wishes in the checklist and in each case the contradictory response was explainable in terms of the girl's situation. (4) The findings from the 26 interviews as to the guidance needs of the girls tended to correspond closely with the findings from the checklist.

GARRISON, WILLIAM ARTHUR. The Relationship of Adjustment and the Self-Concept to Academic Achievement in a Group of 9th-Grade Students. (Ph. D., 1956, University of Denver, Colo.)

Director of study.—Harry R. Moore.

Problem.—(1) To measure the relationship between personal adjustment and academic achievement. (2) To measure responses on the Rotter Incomplete Sentence Blank in terms egoistic-sociocentric and positive-negative and their relationships to academic success.

Procedures.—A total of 119 9th-grade students at 2 Denver junior high schools were used (IQ's of 115, all volunteers). Sample and experimental groups divided into over-achievers, normal, and under-achievers. Group given Rotter ISB and W-A-Y. Null-hypothesis (median test of chi square) that differences in self-concept and adjustment of three groups was due to chance.

Major Findings.—(1) Significant relationships appeared between positive self-concepts and

high achievements, between negative concepts with underachievement, and between adjustment scores and levels of achievement. (2) The "normal" achiever has a balance between negative and positive concepts. (3) Chi-squares ranged from 2.49 (probability .80) to .0572 (probability .98). General probabilities low. (4) The self-concept does not appear to be a unitary thing. Only aspects of it may be measured with any degree of probability.

HARRKOST, ALLEN LEE. Matching Perceptions of Faculty and Students in Relation to Aspects of Academic Morale. (Master's 1956, Western Personnel Institute, Pasadena, and Claremont Graduate School, Claremont, Calif.)

Director of study. —

Problem.—To discover some of the factors affecting academic morale and to deal with matching perceptions of faculty members and students in a number of western colleges and universities.

Procedures.—In 1954 a pilot study was conducted by a special committee of the Academic Council of Western Personnel Institute in seven colleges. The data were analyzed and validating interviews were held on three campuses.

Major Findings.—Three factors were reported as major causes of poor academic morale: lack of vocational goal; inadequate high school preparation for college; student-home relationship.

HALLOCK, GEORGE. Attitudinal Factors Affecting Achievement in Reading. (Ed. D., 1957, Wayne State University, Detroit, Mich.)

Director of study.—Edgar Johnston.

Problem.—To investigate relationship between attitudes and reading achievement.

Procedures.—Standardized tests of intelligence, reading, and personality given to 926 students (public school) in grades four, six, and eight. Factorial design used for analysis of variables: sex, mental age, grade, reading achievement, and attitude.

Major Findings.—Attitudes were found to affect reading in the following order of significance: Family relations, self-reliance, anti-social tendencies, feeling of belonging, withdrawing tendencies, school relations, nervous symptoms, and feeling of personal worth. There were sex differences in feeling of belonging and family relations; boys of all mental ability levels were more affected by unfavorable attitudes than were girls. Sex and grade differences appeared for nervous symptoms; 4th-grade boys of low ability with many nervous symptoms made their lowest mean score; 4th-grade boys of high ability, free from nervous symptoms, made their highest reading scores. Boys and girls (4th grade)

with low ability and free from nervous symptoms made higher reading scores than those of high ability with many nervous symptoms. Since there were no grade differences in any factors other than nervous symptoms, the investigator concluded that the attitudes were present prior to the 4th grade and suggested correction of unfavorable attitudes during kindergarten and 1st grade.

HAWTHORNE, RUBY S. A Comparison of the Reported Problems of Ninth-Grade Pupils of Different Levels of Mental Ability. (Master's 1958, Ohio University, Athens.)

Director of study.—George E. Hill.

Problem.—(1) To determine whether the responses of 9th-graders to the Mooney Problem Check List bear any relationship to level of mental ability as measured by such a test as the California Mental Maturity Test. (2) To determine the implications of the findings for guidance in the junior and senior high school.

Procedures.—The study covered all the 401 9th-grade pupils enrolled in the schools of 4 southern Ohio communities in the school year 1957-58. The Mooney Problem Check List (JH8 ed.) and a group mental ability test (in most cases the California one) were given to the pupils, who were divided into 4 ability levels with lower IQ limits of 130, 110, 90 and 60, called groups "A," "B," "C," and "D," respectively.

Major Findings.—(1) There are differences in problems among the four ability groups. (2) There is no basis for assuming that mentally superior children have fewer problems than average or below average children or that they need no assistance in their solution. (3) The superior are, in general, more concerned with self-improvement and the future than are other children. (4) School problems are of major importance to most students; however, those of low ability are more fearful in their attitudes toward school work than those of superior ability. (5) Although the groups differed in problems, the variations among individuals, at and among all ability levels, are most striking. Many pupils of all levels of ability desire assistance and counseling with their problems, boys seeming to be more hesitant than girls in expressing their desire.

HERNANDEZ, MIGUELINA NARARIO (Lopategui). Needs and Problems of Puerto Rican High School Students Related to Nonvariables. (Ph. D., 1957, Purdue University, West Lafayette, Ind.)

Director of study.—Herman H. Remmers.

Problem.—To give Puerto Rican educators normative information about the problems that concern Puerto Rican high school youth; to provide Puerto Rican high school counselors with an instrument helpful as a screening

device and diagnostic aid in approaching the problems of the individual student.

Procedures.—Translation of restandardized SRA Youth Inventory with an intensity dimension. Representative sample of 532 Puerto Rican high school students. Variables: geographical region, size of school, private-public schools, grade, age, sex, socio-economic level. Two types of scores—one for frequency and one for intensity of problems found for each of eight problem areas and total. Cross-cultural comparison with results obtained in the United States and Panama. T-tests, analysis of variance and Duncan tests used to treat results. Separate norms for boys and girls.

Major Findings.—(1) "After High School" was the area occupying the first rank while "My Home and Family" occupied the last rank in frequency and intensity of the problem. (2) Other areas differed in their relative ranks for frequency and intensity. (3) No significant difference in average response for total inventory between sexes or between grades. (4) Differences between the sexes were not statistically significant in the problem areas. (There was a trend, though, of boys' problems being more numerous and girls' more intense.) (5) Low socio-economic group had the highest average incidence of problems while high socio-economic had the lowest for the total inventory. (Difference between three socio-economic groups significant beyond 1 percent level.) (6) Same situation held true for problems in area of home life and area of school life, with differences significant beyond 1 percent level. (7) Differences in average frequency and intensity of problems between private and public schools was significant beyond 1 percent level.

HESS, CLARKE F. Variables Associated With Underachievement of Freshmen at Marshall College. (Ed. D., 1958, University of Pennsylvania, Philadelphia.)

Director of study.—R. D. Matthews.

Problem.—To discover variables which are associated with academic underachievement in order to improve the program of counseling.

Procedures.—A study of 608 full-time freshmen who entered Marshall College in the fall of 1956. Tests, inventories, school records, and analysis of variance were used.

Major Findings.—Clues to sources of underachievement are more likely to be found through an understanding of the present status of the student, as revealed by his responses on inventories, than through investigation of his environmental background and precollege experiences. In the counseling process, the underachiever should be en-

couraged to explore his present attitudes toward himself, his college, program, his classmates, and his instructors. Responses on the College Inventory of Academic Adjustment indicate that the underachieving student has difficulty in making satisfactory adjustment in other areas. In dealing with the underachiever, the counselor must consider the possibility that failure to achieve academically up to expectations might well be an indicator of conflicts and problems which are facing the student in other facets of his life.

HEUSKINVED, EDWIN D. A Study of the Relationship of Certain Scale Scores on the California Psychological Inventory to Student Adjustment in a College Dormitory. (Master's, 1957, State University of Iowa, Iowa City.)

Director of study.—Kenneth B. Hoyt.

Problem.—To ascertain what relationships might exist between certain scale scores on the CPI and dormitory resident adjustment as judged by dormitory advisers in a large boarding dormitory at the State University of Iowa. The clarification of some aspects of problems in dormitory living and possible indications for personnel administration in student housing were further goals.

Procedures.—The total male freshman population of 288 (fall semester, 1955-56) in a dormitory was given the CPI, and the 5 scale scores were selected for analysis. A rating scale employing these measures was devised and completed for each subject by his dormitory adviser. Composite scores on the rating scale and semester grade-point averages were also obtained. By means of eight objective criteria, two groups of subjects were differentiated and observed during the fall semester. The technique of discriminant function was applied and a two-factor correlation coefficient computed for grade-point average and the achievement via independence scale.

Major Findings.—The sociability, capacity for status, socialization, and achievement-via-independence scales of the CPI did not produce significant differences between the two defined groups, but the responsibility scale did so at the level of confidence. A small but significant relationship between scores on the achievement-via-independence scale and first semester grade-point averages was demonstrated. This correlation coefficient of .32 (S.E. .05) corresponds closely to other research using these two variables with similar populations. Total scores on the CPI did not add significantly to combined prediction in differentiating between residents who were judged by dormitory advisers as well adjusted or poorly so.

A need for more careful evaluation of adjustment to dormitory living was underscored, and also a need for a more careful evaluation, by student advisers and personnel administra-

tors, of differential perceptions of social requisites for dormitory living.

HODINKO, BERNARD A. *The Relation Between Personal Factors and Opinions Regarding Conduct Situations in a Sample of The Pennsylvania State University Students.* (Ed. D., 1957, The Pennsylvania State University, University Park.)

Director of study.—A. M. Wallington.

Problem.—To ascertain the opinions of undergraduate students at The Pennsylvania State University concerning the relative censure they would place on students committing certain violations of University conduct regulations; and to determine whether statistically significant differences existed in the degree of censure which undergraduate students, according to selected personal background factors, would place on students committing these rule infractions.

Procedures.—Two instruments, the Student Opinionnaire and the Personal Data Inventory, were used to elicit responses of the 520 undergraduate students in the study population. A preliminary study of 120 students was conducted to obtain insights into the face validity of the instruments and to determine the items to be included on each. Responses were tabulated and presented in 45 tables reporting the percentage of students indicating various disciplinary actions for each of 17 conduct situations. The chi-square technique was used to test the significance of the differences in the distribution of opinions between students of various status classifications as well as between situations.

Major Findings.—In the opinion of students, those standards which severely condemn theft for the material value of an article and condemn cheating involving collusion, were most appropriate. On the other hand, student opinion indicated little support of strong policies against the use of alcoholic beverages. Men were considerably more critical than women of acts involving cheating, property destruction, or theft; but more approbative of the misuse of alcoholic beverages or sexual promiscuity. An increase in age seemed to have a liberalizing influence on student opinions about the seriousness of most of the 17 acts of misbehavior. Opinions by college class revealed milder censure by the upper-classmen, as contrasted with lowerclassmen, of sexual promiscuity and rule infractions resulting from college foolery. Generally, fraternity men expressed much milder censure of the entire set of 17 conduct situations than did nonfraternity men. Sorority and nonsorority groups, however, reacted toward the rule infractions in question with slightly more strictness. Although the responses of Catholics, on the whole, were more tolerant in nature than those of Protestants toward two incidents regarding the misuse of alco-

holic beverages, the opinions of these groups did not vary widely on the seriousness of the other conduct situations.

HOLMES, CHRISTINA. *A Study of the Relationship Between Certain Personality Factors and Self-Estimation of Aptitudes.* (Master's, 1957, University of Texas and Seguin Independent School District, Austin and Seguin, Tex.)

Director of study.—Royal R. Embree.

Problem.—To study the relationship of temperament traits, as measured by the Gullford-Zimmerman Inventory, to the accuracy and direction of error of estimates made by 11th grade students of their probable performance on the Differential Aptitude Tests. Subjects were enrolled in the Seguin, Tex., High School during the spring of 1957.

Procedures.—A method was developed for the estimation of scores expected on each of the eight tests of the DAT, making use of stanine units and a guide sheet which showed, by percentage and number, what each stanine meant in terms of position in the group. Stannines based on estimates were compared with those derived from actual scores to provide measures of accuracy of estimation and direction of error. The Gullford-Zimmerman Temperament Inventory was given to all subjects, for whom an index of social status was also secured. Principal techniques used included *t* and *F* tests and chi square.

Major Findings.—(1) On the whole, the means of estimates were closely in line with the means of actual scores. With high significance, scores on the Mechanical Reasoning test were overestimated by boys and underestimated by girls. (2) Across the eight tests, girls underestimated scores significantly more than did boys, who tended to produce a grand average of estimates closely in line with scores. (3) Students of lower social status tended toward overestimation while those of middle and higher social status were inclined toward accuracy. (4) With boys, the GZ Friendliness scale was significantly related to accuracy of estimation. Subjects who described themselves as less friendly were more accurate than those who described themselves as friendly. (5) With girls, the GZ General Activity scale was significantly related to direction of error in estimation, with underestimation on low activity scores and overestimation in high activity scores. Low scores on the Friendliness scale were associated with overestimation, while high scores were associated with underestimation. (6) To a sharp degree, subjects with higher scores on the DAT tended to underestimate while those with lower scores tended to overestimate.

JAEGER, MARGARET ANN. *A Comparison of the Academic Achievement of Siblings in the A.B. Program at Duke University.*

(Master's, 1958, Duke University, Durham, N.C.)

Director of study.—Henry Welts.

Problem.—To determine the relationship between academic performance and ordinal position of siblings in a family.

Procedures.—Comparisons (t-tests) were made (in six academic areas) between the academic performance of 88 pairs of siblings (older-younger brothers, older-younger sisters, older brothers-younger sisters) in the liberal arts program of Duke University.

Major Findings.—In like-sexed pairs the older sibling did slightly better. Only a few differences were statistically significant. In unlike-sexed pairs, only chance differences were found.

JENSEN, VERN H. An Analysis and Comparison of the Adjustment Problems of Nonachieving College Students of Low Scholastic Ability and Other Groups of Achieving and Nonachieving Students. (Ed. D., 1957, University of Colorado, Boulder.)

Director of study.—Clarence Faylor.

Problem.—To determine (1) whether or not nonachieving students of low scholastic ability are also handicapped in nonintellectual areas of college life, and (2) to what degree the adjustment problems of nonachieving students of low scholastic ability as a group differ from those of other achieving and nonachieving students.

Procedures.—A total of 458 freshmen were selected at the Brigham Young University in the autumn quarter of 1955-56. On the basis of certain selective criteria, the students were separated into four groups: (1) scholastically nonachieving students of low scholastic ability, (2) scholastically achieving students of low scholastic ability, (3) scholastically achieving students of high scholastic ability, (4) scholastically nonachieving students of high scholastic ability. Group comparisons were made on the basis of scores derived from the Minnesota Multiphasic Personality Inventory, the Kuder Preference Record, the Mooney Problem Check List, the College Inventory of Academic Adjustment, and a questionnaire.

Major Findings.—With certain exceptions, nonachieving students of low scholastic ability generally indicated more adjustment problems than the other groups. The gifted achievers, on the other hand, tended to express fewer problems than the other three groups. The nonachieving students of low scholastic ability (1) showed a tendency to score higher than the gifted achievers on the majority of the MMPI scales, (2) expressed more problems than the other groups on the majority of the categories of the College Inventory of Academic Adjustment and also

certain areas of the Mooney Problem Check List, (3) preferred areas of interest which were furthest removed from the traditional academic curricula of the university, and (4) expressed less tendency to attend those extracurricular functions which were of a cultural or intellectual nature. Nonachieving students of low scholastic ability were not only handicapped academically, but were also disadvantaged in nonintellectual areas of college life.

KRISER, KENNETH K. Background Factors of Forty-five Boys at the State Industrial School, Ogden, Utah. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—Heber B. Taylor.

Problem.—To gain a better understanding of the effect of background factors on the acceptance or rejection of treatment in the various processes to be used in a larger study.

Procedures.—A certain number of students from the entire population were selected and placed in groups of four. Four caseworkers were assigned to apply intensive individual casework, groupwork, or routine contacts. A measurement before and after a fixed number of hours would determine the extent of change and the effectiveness of either of the specific treatments involved.

Major Findings.—(1) The neighborhood of the child was a contributing factor towards his delinquency. (2) The absence of either parent in the home was not a causative factor in this study. (3) The multiple causation theory of delinquency was substantiated. (4) The majority of offenses of the boys were committed against property rather than persons.

KIMLER, STEPHEN S. The Relationship of Parental Identification to the Quality of Interpersonal Relations in the Classroom. (Ed. D., 1958, Arizona State University, Tempe.)

Director of study.—Robert A. Helmann.

Problem.—To find the degree to which parental identification, suitably measured, could be a useful predictor of ultimate classroom behavior on the part of teacher-trainees.

Procedures.—Correlational analysis of various measures of parental identification—both at conscious and less than conscious level—with criterion of Minnesota Teacher Attitude Inventory, and a technique of behavior description specifically designed for this study were used. The S's were 53 female elementary education student teachers who were given several different tests over a 2-day period. They were followed up in their student teaching and measured with the behavior descriptions as to their interpersonal relations in the classroom.

Major Findings.—No conscious level predictors (personality questionnaires) measure at levels sufficiently above chance to warrant their use. The MTAI seemed to measure a greater number of different types of interpersonal relationships than did the other criterion measure, the behavioral descriptions. The Rotter Incomplete Sentences Test and other less direct measures of parental identification did predict above chance level with the behavior description of actual classroom behavior of the student-teachers. S's with stronger father identification (females) tended to perceive disruptive pupil behavior readily and report its personal annoyance freely.

LOWER, JAMES MEREDITH. Interrelationship Between Pupil Achievement, Pupil Socioeconomic Status, and Other Selected Factors. (Master's, 1958, Iowa State Teachers College, Cedar Falls.)

Director of study.—Wray D. Silvey.

Problem.—To determine the interrelationship of pupil achievement, pupil socioeconomic status, and other factors associated with pupil achievement existing among elementary pupils in three selected elementary schools in the Cedar Falls Community School District, Iowa, and to note differences existing among the constituency of these schools.

Procedures.—The sample group comprised 242 3d- and 6th-grade pupils. Information was gathered from school records and a simple questionnaire was sent to the pupils' parents.

Major Findings.—A high degree of correlation exists between pupil achievement and pupil socioeconomic status. When pupils are grouped from high to low according to socioeconomic status, their average achievement in basic academic skills may be expected to rank in a similar order. Many differentials may operate in association with pupil achievement, to various degrees of association. The constituency of a school may differ as to pupil achievement, pupil socioeconomic status, pupil intelligence, and teacher experience.

MARCERE, NORMA. A Comparative Study of Interaction of Eighth-Grade Students of Differing Socioeconomic Levels. (Master's, 1957, Kent State University, Kent, Ohio.)

Problem.—To discover the extent to which there is a similarity of variety of experiences involving social interaction, and the extent to which socioeconomic status affects the area of social interaction.

Procedures.—Data were collected by questionnaire from a sampling of 229 8th-graders from three Canton, Ohio, schools, classified as upper-upper, middle-middle, and lower-lower by some 15 individuals of differing occupations and socioeconomic levels. Analysis of data was accomplished by statistical methods with profuse use of figures and tables.

Major Findings.—The number of social interaction experiences did not vary significantly except that the lower status child had considerably more frequent peer group associations in play activities than either of the other two groups. The upper status group had more varied experiences than the other two. The higher the status, the greater the number of community experiences. The upper status family is smaller than the lower, and, generally, perception and communication receive greater stress. Play groups are smaller in the upper group and facilities are usually specifically designed and more expensive than those of the lower group, which may lack a one-with-group identification. Church attendance is more frequent in upper groups and usually involves the entire family as opposed to going alone. Identification with various church activities varies significantly. Upper groups travel much more extensively than the lower groups who seldom go far beyond the neighborhood limits. Upper group families tend to participate as a unit in more activities. The middle class group tended to follow a middle-of-the-road position with regard to the above items. The trend appeared to present a continuum correlating directly to the actual degree of status.

MARSHALL, MINOR JACK. Awareness of Sex Role and Children's Interests. (Ph. D., 1958, University of California, Berkeley.)

Director of study.—Lawrence Stewart.

Problem.—The thesis underlying the investigation was that (inventoried) dislikes develop out of a background of a general acceptance and reflect one's awareness of role. The hypotheses tested were: (1) The number of dislikes expressed by an individual on an interest inventory will be directly related to his awareness of appropriate roles; and (2) the number of dislikes expressed by an individual on an interest inventory will be directly related to his awareness of inappropriate roles.

Procedures.—**Definitions:** "Role" was defined as those activities and goals subscribed to by children in general. "Awareness of role" was defined as the discrepancy between one's perception of peer preferences and peer norms. A children's Interest Inventory and a Role Test for boys and girls in general was administered to a sample of 5th-grade children. Data for boys and girls were analyzed separately. Awareness scores on the Role Test were correlated with dislike scores on the interest inventory.

Major Findings.—The hypotheses were not supported by the data. The correlations between dislikes and awareness of role were significant and negative. The most plausible interpretation of the findings is that awareness of role enabled individuals to conform to group standards with respect to their per-

sonal preferences as measured by the interest inventory, and in conforming, they were obliged to accept rather than reject, the majority of interest inventory items. With respect to the inventoried interests of middle class 10-year-olds, likes rather than dislikes were associated with awareness of role.

McCoy, Florence J. School Factors in Relation to Adjustment of Junior High School Boys. (Master's, 1958, Claremont Graduate School, Claremont, Calif.)

Director of study.—F. J. Perkins.

Problem.—To determine the major adjustment problems of junior high school boys and to find their effect on school achievement, grades, attendance, and conduct.

Procedures.—The Bell Adjustment Inventory, Student Form, was administered to 100 8th-grade boys. Twenty-seven boys rated "good" and 27 "poor," and the two groups were paired as closely as possible as to intelligence and chronological age. Each boy's attendance record, grades, and achievement record for reading and arithmetic were compared with those of the opposite boy in the pair. Boys of both groups were rated on the Wisconsin Behavior Rating Scale by their core teachers and the results were analyzed. By representative sampling 10 cases were selected for individual study, home visits, and parent conferences.

Major Findings.—Most of the data did not give evidence of a significant difference between the "good" and the "poor" group as to attendance, grades, school achievement, and school conduct. There was indication, however, that if many more cases had been used for the study, conclusive evidence might have been obtained in favor of the "good" group. For each factor considered, the "good" group had a better record, except for reading. The wide range of personality and behavior problems uncovered by the case studies calls attention to the fact that children need better conditions for growing up, and need group and individual counseling and discussion of common problems to help them in self-understanding.

McGee, Martha. The Effect of Acceleration Upon the Academic Achievement and Adjustment of a Group of Gifted Junior High School Students. (Master's, 1958, Duke University, Durham, N.C.)

Director of study.—Henry Welts.

Problem.—To evaluate the effect on achievement and personal adjustment of acceleration of gifted children in the junior high school.

Procedures.—Subjects: 95 9th-graders who had completed grades 7 and 8 in one year (experimental group), 74 regular 9th-graders (control group I) and regular 8th-graders (control group II). All had IQ's above 120. Analysis of variance (treatment by level de-

sign) on language, arithmetic, and reading achievement were computed. Differences in personal and social adjustment were tested for significance by t tests.

Major Findings.—Acceleration appears to have improved achievement relative to age-peers in reading and arithmetic, but not in language (grammar) skills. Acceleration did not adversely affect performance in language and arithmetic compared to grade-peers. Accelerated students were not handicapped in personal or social adjustment.

McKee, Richard Craig. An Evaluation of the Relationship Between College Educational Level Achieved and Self-Concept Ratings. (Ph. D., 1958, University of Denver, Colo.)

Director of study.—Daniel D. Feder.

Problem.—To determine quantitatively the direction of change in students' patterns of values during college years, and to discover to what extent the changes are attributable to the students' college experiences.

Procedures.—W-A-Y Technique, Ohio State Psychological Examination, dropout records, grade-point averages, graduation success, etc., correlated with 250 students at the University of Denver, used on 4-year longitudinal basis (1954-58).

Major Findings.—(1) Early dropout students tend toward egotism. (2) Successful graduates (4 yrs.) tend toward altruism. (3) Late dropout students tend toward egotism. (4) Difference between early dropouts and successful graduates in terms of self-concept altruism was significant at the 5-percent level of confidence. (5) Greatest changes toward altruism occurred in major study areas of business, nursing, social science, communications, education, and science. (6) High levels of aspiration generally resulted in high levels of achievement.

Moore, Lewis. An Investigation of the Relation Between Scholastic Achievement and Social Acceptance in the Classroom. (Master's, 1957, San Diego State College, Calif.)

Director of study.—George A. Koester.

Problem.—To investigate any relation that might exist between acceptance or rejection by peer groups, and scholastic achievement in the skill subjects. An attempt was made to determine whether, in the groups involved, those children who were accepted by their peers differ in total achievement from those who were either rejected or ignored.

Procedures.—Study based on two types of tests administered to 224 4th- and 6th-grade children at Kit Carson Elementary School: The Metropolitan Achievement Test, given to four 4th-grade classes, and the Stanford Achievement Test to three 6th-grade classes.

All seven classes were given a sociometric test modeled after tests used by recognized authorities in this field. The results of both types of achievement tests were tabulated and numerous methods were used to discover any relation that might exist between the two sets of scores. Both weighted and unweighted scores were used in the preliminary work. Since both methods gave essentially the same results, the weighted scores were used in the final comparisons, as this method made it easier to break ties. In making comparison between achievement and sociometric scores, two approaches were used. The achievement scores alone were compared with the sociometric scores, with no regard for mental age equivalents. In the second tabulation the mental age factor was included. In effect, this meant that the achievement expectancy was compared with the social rating.

Major Findings.—There was a relation between social acceptance and classroom achievement. Other factors such as mental age and chronological age did not appear to exert a controlling influence.

MERRILL, DAVID WALKER. Attitude Differences Observed Between Achieving and Nonachieving Superior Male College Students. (Ph. D., 1957, University of Denver, Colo.)

Director of study.—Daniel D. Feder.

Problem.—To identify differences in attitude toward family as an element of motivation which might be related to achievement or nonachievement in college.

Procedures.—Top quartile (Ohio State Psychological Examination) male students, ages 19–26. Achievement from university records. Attitudes obtained from subjects during interviews which were tape recorded, then analysed by counselors (three plus author).

Major Findings.—(1) Differences between achievers and nonachievers exist. Achievers tend to respond in a mature, independent, self-reliant manner. Nonachievers suggest dependence and immaturity. (2) Support seen for the Pepinsky Hypothesis that some underachievers may be having outright difficulty with their parents. (3) Support also for H. H. Morgan theory that achievers tend to be optimistic and realistic. (4) Underachievers likewise tend toward conformity.

MEYER, JOSEPH W. A Comparative Study of the Post-School Adjustment of Low-Achieving Graduating Students. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Phelon J. Malouf.

Problem.—To examine and compare the post-school adjustments of a group of low-achieving students, who had graduated from high school, with a group of low-achieving students

who had terminated their schooling before graduation.

Procedure.—The study concerned 28 graduates and 54 dropout members who had either graduated or dropped out of Murray High School between the years 1942 and 1952 with a grade-point average of 1.5 (D plus) or less. Information regarding the adjustments (marital stability and adjustment, occupational perseverance and status, civic responsibility and participation, and military perseverance and attainment) of the graduates and the dropouts was acquired through questionnaire and interview techniques. The chi-square method was employed in computing the significant difference between the two groups in relation to each area of adjustment studied.

Major Findings.—No significant differences between the adjustments of the low achieving individuals who graduated and those who terminated school early could be attributed to the duration of high school attendance. The data obtained would indicate that the students' post-school adjustment was often affected by their overall personal adjustments as much, if not more, than by the event of their high school graduation. For example, a lack of perseverance on the part of the students who did not graduate was found throughout this study, but the fact that these students withdrew from school was in itself an indication of their lack of perseverance. Therefore, this adjustment pattern cannot be considered to be caused by the students' dropping out of school.

MILLER, CARRIE EULAH. The Effect of the Home Broken by Divorce Upon the Self-Concept of Selected College Women. (Ph. D., 1958, University of Denver, Colo.)

Director of study.—Harry R. Moore.

Problem.—Are students from homes broken by divorce less well adjusted, more dissatisfied with themselves, less what they would like to be, less able to perceive themselves as they really are, than individuals from unbroken homes?

Procedures.—Dymond Adjustment Scores used on 10 matched pairs of women students alike in most respects except for "divorce" and "nondivorce." Subjects rated themselves on selected items. T test for correlated means, chi squares, and other usual statistical methods used.

Major Findings.—(1) Differences between two groups of students were in the expected direction. Levels of confidence for difference relationships ranged from 10 to 2 percent, most being greater than the 5-percent level. (2) The greatest area of difference between the groups was on self-referent items (2-percent level). (3) One unexpected finding was that students from broken homes were greatly interested in music and the expressive arts,

although N here was so small as to leave doubt as to the real significance.

MUSSELMAN, DAYTON LAVERNE. Patterns of Circumstances Related to Problems Expressed by Seventh- and Eighth-Grade Pupils. (Ed. D., 1958, University of Colorado, Boulder.)

Director of study.—C. W. Fallor.

Problem.—To secure descriptive information about the problems expressed by 7th- and 8th-grade pupils in relation to their behavior, achievement, abilities, parent relationships, transiency, and church attendance. The interrelationships between and among the problems expressed and the personal and environmental circumstances were sought as guides for curriculum and guidance planning and as a stimulation to increased teacher interest in and understanding of pupils and their environments.

Procedures.—All pupils in the 7th and 8th grades in nine public schools of a midwestern city of approximately 135,000 population were asked to express their problems on the SRA Youth Inventory, Form A. The total number of problems expressed by each of the 2,302 pupils was recorded in five selected areas of the checklist: My School, About Myself, Getting Along With Others, My Home and Family, and Health. Group tests of academic ability, reading ability, and achievement were used. Behavior groups were selected by teacher judgment of pupils getting along well and not getting along well with others. All pupils who had been officially summoned before juvenile authorities in the semester current to the study were also considered a group with undesirable behavior. Personal data about family, number of schools attended, and church attendance were secured from pupils by questionnaire. Standard statistical procedures, the Fisher t, chi square, and rank correlation, were used to test the significance of the relationships.

Major Findings.—The SRA Youth Inventory obtains responses which are quantitatively different between and among seventh and eighth grade pupils of different personal and environmental circumstances. The tendency to perceive more situations about self and environment as problems related to constellations of circumstances rather than to any one circumstance. This proneness to express more problems is interrelated positively with these school circumstances: lower achievement, lower mental ability, lower reading ability, less-desirable behavior, and more school transiency. Problem proneness is positively related also to these community circumstances: delinquent behavior, more broken homes, lack of church attendance, and very significant differences among areas of the city.

OLIVE, LOIS HOWSDAN. Differential Personal Values of Sorority and Non-

sorority Girls. (Master's, 1957, University of Nebraska, Lincoln.)

Director of study.—Charles O. Neldt.

Problem.—To compare the personal values of sorority and nonsorority students.

Procedures.—Poe Inventory of Values was administered to 98 sorority members and 81 nonsorority members. The mean scores were compared.

Major Findings.—No significant differences were found.

ORR, MARY ELIZABETH DEAN. A Study of the Characteristics of College Women on Scholastic Probation Based on Information From Interviews and School Records. (Master's, 1957, Purdue University, Lafayette, Ind.)

Director of study.—Lee E. Isaacson.

Problem.—To investigate data regularly available to the university regarding its failing women students in order to discover whether any means existed to discover them and to help them before failure occurred.

Procedures.—Purdue women students placed on scholastic probation in January 1957 voluntarily participated in this study. Pertinent information was culled from their central file folder including data from their application for admission form, semester grade reports, correspondence, etc. Thirty-four of the students were given the American Council on Education Psychological Examination and the entire 61 were administered a Structured Interview Questionnaire. Their test scores on the Purdue Orientation Tests in English and mathematics were obtained from the Bureau of Educational Reference. The useful statistical measures for determining similarities and differences were used.

Major Findings.—Purdue University did not possess any significant available data which would easily distinguish the failing from the successful female student before failure occurred. Since the failing student cannot be distinguished by lack of ability to do college work, it is reasonable to assume that failure is the result of several other operating factors which have yet to be investigated—both singularly and in combination.

RICE, DAVID LEE. A Comparative Study of the Personal Adjustment of High School Students Attending a Reorganized Rural School With High School Students Attending Selected Rural Township Schools. (Ph. D., 1958, Purdue University, Lafayette, Ind.)

Director of study.—Clarence A. Pound.

Problem.—To compare the personal adjustment of students attending a high school in a reorganized school district, which met

the criteria for a satisfactory school administrative unit, with the personal adjustment of students attending selected inadequate small high schools in single townships.

Procedures.—The student populations used consisted of 332 students attending a reorganized school and 472 students attending five single township schools, located in the same county and operating under similar administrative, economic, and social influences. The SRA Youth Inventory Form 8 was used as an estimate of personal adjustment in the study. The null-hypothesis of no difference between the mean frequency scores, and between the mean intensity scores for each type school, was used for each of the eight areas of the SRA Youth Inventory. The total score and basic difficulty items were tested by t-tests at each grade level. The t-tests were made with and without the effect of socioeconomic-status partialled out. The same groups were also compared on the rank of the eight problem area scores on frequency and intensity of items checked.

Major Findings.—Tenth-grade boys in the reorganized schools reported a significantly greater number of problems and problems more intense than their counterparts in the single township schools. In the other areas of significant differences, the single township groups reported a greater number of problems and a greater intensity of problems. Particularly extreme were the scores of 12th-grade girls in the single township schools. In both types of schools, problems were greatest in the area of "After High School" and next greatest in the area of "Getting Along With Others." Problems were rated as least in the areas of "Home and Family" and "Health."

ROLLINS, KENNETH W. The Adolescent Peer Group and School Achievement. (Ed. D., Harvard University, Cambridge, Mass.)

Problem.—To combine the concern of educators for greater student achievement with the possibilities of discovering the extent of peer group influences upon that achievement. (Such a discovery might point the way toward more effectively dealing with stimulation for learning and with learning efficiency itself.)

Procedures.—In grade 11 of a midwestern high school 250 adolescent boys were screened by a social index to determine their normal social peer or grouping. Eighty-two were found to be members of peer groups from 6 to 9 in number, and 62 of smaller peer groups, from 3 to 5 in number. Another kind of grouping was recognized and labeled the "fringe group." (The fringe adherent was an individual who belonged to no identified group, but who shared a mutual attraction with one, two, or three accepted members of peer groups.) Fifty-three pupils were members of fringe

groups, 19 of them being the adherents. Altogether, 163 of the 250 boys studied were members of one group or another.

After the peer groups were identified, the school marks of all individuals were acquired, together with their test scores on mental abilities, and the results of the Illinois Inventory of Pupil Opinion, the latter used to measure attitude toward school. For each group an analysis of variance was made for each of the factors of achievement, ability, and attitude, to ascertain whether there was a significant ratio of variance among groups as against variance within groups.

Major Findings.—The results raised questions about the nature of peer group influence, which the literature supported as being of considerable import in other areas of the lives of adolescents. The study points toward some sort of differential nature to the peer group influence, which may be operative in some areas of adolescent living but inconsequential in others. Teachers and others may be inclined to assume erroneously that there is influence in one area when it is observed in another. If this be so, the study results serve as warning that much cannot be taken for granted.

Unless a group gives evidence of being uncommonly antagonistic toward school, or uncommonly favoring school, the group standards and attitudes are not likely to govern school achievement of individual members. Where mental ability was so significantly at variance among the larger peer groups of six to nine in number, but not among smaller or fringe groups, it may be that different forces brought certain students together in larger and smaller groups, and divergent individual needs were met by groups of different sizes. With the larger peer groups, mental ability itself emerged as a possible determinant of group membership.

ROTTMANN, LEON HARRY. A Study of Some Characteristics of Scholastic Probationers. (Master's, 1957, University of Nebraska, Lincoln.)

Director of study.—Gordon H. Henley.

Problem.—To describe the characteristics of students who were placed on probation for scholastic reasons at the University of Nebraska.

Procedures.—Sixty-four probationers and a control group were administered an Attitude Test developed by the author.

Major Findings.—There were no significant differences between probationers and nonprobationers as measured by the Attitude Test.

RUSSELL, ROGER D. A Comparative Study of the Characteristic Difference Between Passing and Failing Freshmen at the North Carolina College at Durham.

(Ed. D., 1957, University of Pennsylvania, Philadelphia.)

Director of study.—R. D. Matthews.

Problem.—To identify characteristic differences between passing and failing students at North Carolina College, Durham.

Procedure.—Questionnaire, tests, and marks.

Major Findings.—North Carolina College needs (1) to help its "feeder" schools recognize and provide more adequately for the guidance needs of college-bound students; (2) to concentrate on recruiting more high-ranking graduates through an expanded program of scholarships and work aid; (3) to provide a course in college orientation with emphasis on "How to Study"; (4) to consider a special program, largely of remedial courses, for students who are admitted with certain weaknesses suggested by "middle" and "lower" third high school graduation; (5) to implement a program of supervised study as a requirement for students experiencing academic difficulty; (6) to provide a reading clinic for students with known reading deficiencies; (7) the Iowa Silent Reading Examination might well be included in the freshman test battery, since it appears to have considerable value in identifying students with poor academic potential; (8) the knowledge, skills, and participation of the entire faculty and staff of the college should be utilized in guidance for students; (9) facilities and services of the guidance center should provide more adequately for the individual guidance of students by diagnosis of interests, aptitudes and abilities, and by planning study programs.

SAVENKO, NIKOLAI V., and ALEXEY SHUKIN. A Study of Relationship of Temperament, Self and Ideal Perception, Level of Reading, and Other Selected Factors to College Over- and Under-Achievement. (Master's, 1956, Springfield College, Springfield, Mass.)

Directors of study.—Seth Arsenian, Allen R. Kaynor, James S. Peters II.

Problem.—An exploratory inquiry into the possible personality attributes and other characteristic differences that may exist between students whose academic achievement tends to be above or below the level of achievement suggested by their assessed scholastic aptitude.

Procedures.—Selection of subjects, members of the sophomore class at Springfield College in 1956, was in terms of a $\pm .5$ or larger standard score discrepancy between academic index and ACE Psychological Examination Total score. Other standard tests used were the Thurstone Temperament Schedule and the Nelson-Denny Reading Test. A device for assessment of temperamental self and ideal concepts on the Thurstone, and a Scholastic

Motivation questionnaire were developed by the authors. Various statistical techniques were applied to the data.

Major Findings.—(1) Test profiles of groups differentiated better than profiles of individuals. (2) Over- or under-achievement was taken to be a discrepancy of a .5 standard score or more. On this basis, some differences were found in scores on the Thurstone Temperament Schedule, and in self-estimates of temperamental qualities. (3) No significant differences were found between perceived self and ideal self. (4) Overachievers had a significantly higher level of reading ability.

SHELL, RICHARD H. Quantitative Analysis of Experimental Efforts to Change Adolescent Attitudes Through a Course in Interpersonal Relations. (Ed. D., 1957, Wayne State University, Detroit, Mich.)

Director of study.—Mildred L. Peters.

Problem.—To evaluate the effectiveness of a 16-week secondary course, "Interpersonal Relations," in improving the personal and social adjustment of adolescent school children. Improvement was to be reflected by positive changes in the subjects' attitudes toward their family, peers, and school, and the children who completed the course might be expected to perceive both the course and their teachers as more adequate.

Procedures.—In one school 97 girls and 48 boys comprised the experimental group. In another school the 9B history class, 92 girls and 50 boys, considered comparable to the experimental group, formed the control group. Four data-gathering instruments were utilized in both a pre-test and a post-test situation, namely: California Test of Personality (Secondary Form) 1953 Revision, a Questionnaire for Parents, Pre-Course Questionnaire and Post Course Evaluation, and a Student Attitude Form (all excepting the first being original forms). The t-test of differences in means was utilized in comparing the control and experimental or the pre-test and post-test groups.

Major Findings.—With the exception of Teacher Adequacy, differences were not significant. The experimental group's mean scores were statistically significant as to Teacher Adequacy for three of the four syndromes. The course, "Interpersonal Relations," did not achieve its purpose as measured by the data gathering instruments and the experimental design which was employed. On the other hand, the course actually may have contributed substantially to the students' welfare in areas other than those considered within the limitations of this study.

SCHIFANO, CHARLES PHILIP. A Comparison of the Attitudes Held by Parents, Teachers, and Students on the Behavior

Difficulties of Children. (Master's, 1958, The University of Akron, Ohio.)

Director of study.—Mabel M. Riedinger.

Problem.—(1) To determine and compare the attitudes of teachers, parents, and students themselves toward a predetermined list of commonly accepted behavior difficulties of students; and (2) to determine which of these they considered to be important.

Procedures.—Attitude questionnaires were distributed with the permission and the assistance of the respective principals and their teachers, to students, parents, and teachers in selected senior high schools in Akron. Returns were received from approximately 89 percent of the students, 57 percent of the parents, and 69 percent of the teachers sampled. A weighted score of 2, 1, or 0 was assigned to each response, as it agreed, agreed in part, or disagreed, respectively, with authority. These scores were totaled for each item by sex for each group. The parent group was also divided into three categories based on parents' education, and the teacher group into four categories based on years of teaching experience. Total weighted scores were converted into an index number which was a ratio of total weighted scores to total response. These indices were used in making comparisons. A percent of disagreement, using zero response, was determined for each item and also used in making comparisons.

Major Findings.—Students recognized most readily as problems those items of which the adult world had made them most aware through punishment, dealing with violation of rules and transgression against authority, and morality. Parents were mostly concerned with authority and student interrelationships. Although recognizing as problems violation of school rules, parents failed to give much consideration to problems within the classroom itself. Teachers gave evidence of primary concern with smooth operation of the group and with challenges to their authority, the younger teachers especially recognizing problems concerned with social or emotional maladjustment. The findings in the study point to a need for educating or informing the parent of the newer understandings regarding child growth and development, and for teachers to put into practice in their teaching this information.

SCHMITT, CHARLES ERNEST. A Comparative Study of Problems That Concern Subjects With Amputations and Cardiac Disabilities. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Cecil O. Samuelson.

Problem.—A comparative study of problems that concern subjects with cardiac disabilities and amputations, and to consider any differences in the number of problems reflected that might differentiate between the amputee and

cardiac groups. Also, to point up any differences that might exist in the number of problems reflected in relation to age, education, age at onset of disability, marital status, and employment.

Procedures.—The basic data were secured from information reflecting the kinds and number of problems obtained from the Mooney Problem Check List. The investigator administered the instrument to each subject individually at the time of a home visit. The subject was asked to respond to the problems as indicated in the instruction and was assured he would be unidentified in the study. The check list's items were recorded and tabulated in a manner to facilitate the study of the required data. Standard statistical procedures were utilized whenever appropriate in obtaining a description of the sample groups in terms of means, standard deviations, and tests of significance.

Major Findings.—(1) Responses revealed that only two of the total 288 problems on the Mooney Problem Check List were of concern to more than 50 percent of either sample group. The two items pertained to having a permanent disability and having heart trouble. (2) There were no differences statistically significant between the number of problems, reflected by the amputee or cardiac groups on the entire check list or in the nine separate areas. (3) The size of the two sample groups in relation to age, education, marital status, years disabled, and employment status did not justify exact statistical treatment; such comparisons as were made did not seem to reveal that the total number of problems in relation to the above variables would distinguish between the two sample groups. (4) The problem pertaining to heart trouble distinguished statistically at the 1-percent level between the amputee and cardiac groups. (5) The problems that pertained to a savings plan, doubting the wisdom of a vocational choice, and wanting a hobby, distinguished statistically at the 5-percent level between the cardiac and amputee groups.

SCHMURR, LEONARD W. Behavioral Characteristics Reported by Teachers in Referring Problem Children to Multnomah Juvenile Court. (Master's, 1957, Portland State College, Oreg.)

Director of study.—Leonard W. Schmurr.

Problem.—To discover (1) the types of behavior problems school people report, (2) whether these reports contain information which reliably indicates serious psychological disorders, and what might be expected as a result of proper definition and recognition of these problems. In addition, the findings of experts in the field of mental hygiene and child behavior were sampled to discover symptoms of maladjustment which the experts feel should be observed and reported from the school situation.

Procedures.—A survey of 90 court referrals initiated by school attendance department counselors, containing information to be used by juvenile court authorities in handling the cases. In an effort to discover things of most concern to school people and most often reported in court cases, tally was made of the actual descriptive terms which teachers used and which were found in the court referrals. Analyses of these court referrals used as a means of discovering whether or not symptomatic behavior reported in the referrals included that which might have been indicative of serious emotional disturbances, and whether or not causes of disorder were suggested in the behavior descriptions and other information given. Significant behavior symptoms which should be observed in the school situation were sought from two sources: a survey of the literature, and a review of some typical case histories selected from visiting teacher files. The case histories examined were those in which disturbances reported were of long enough duration so that some understanding could be reached of the development of early behavior traits which were symptomatic of serious emotional disturbances.

Major Findings.—The school referrals reflected a general concern of teachers and other school personnel for students' personal problems. While many things in the teachers' reports seemed to involve their reactions to inconveniences and difficulties caused by students' behavior, the author concludes that qualified persons examining these reports would receive information valuable in the discovery of the basic causes of behavior disorders. The central responsibility of the school in the discovery and referral of serious behavior problems is repeatedly indicated by this study of 90 juvenile court referrals, three case histories, and the opinions of experts in the field of human behavior as they relate particularly to school children.

SCOTT, MERILIS MARIE. A Growth Study of the Social and Academic Competence of a Group of Special Class Children. (Master's, 1958, Springfield College, Springfield, Mass.)

Director of study.—Allen R. Kayner.

Problem.—To determine the social and academic growth during a school year of children assigned to a special class in a western Massachusetts suburban community.

Procedures.—Data included results of Stanford Achievement Tests in September and June, the Vineland Social Maturity Scale in September and June, analysis of Stanford-Binet protocols, and continuing case histories of the 15 children by the author, who was also the special class teacher for one-half of the academic year. Data presented and analyzed for each case and summary charts provided.

Major Findings.—The children gained an average of 3.8 months academically compared with their average gain of 2.0 months in previous academic years without special class. In Social Maturity, the Vineland was carefully checked by use of case data and revealed social growth of 19.6 months. Children with mental retardation due to physical involvements gained 3.3 months academically, compared with 4.2 months for those of unknown etiology. In social growth the physically involved gained 22.6 months to 17.6 for the unknowns. The physically impaired gained less academically, but more socially, than those with unknown etiology; and the special class experience contributed to greater growth, both academically and socially, than previous regular class experience.

SLINGER, GEORGE E. Freshman Problems and Academic Achievement. (Ed. D., 1955, University of Florida, Gainesville.)

Problem.—To determine the relationship, if any, between problems of freshmen at the University of Florida and academic achievement of these freshmen.

Procedures.—Instruments used: Mooney Problem Check List; ACE Psychological Examination; Grade-point Average. Sample 251 students, 27 percent female, 73 percent male. Analysis by correlation of variables; namely, scholastic aptitudes, problems identified by students, and grade-point averages and problems of adjustment to college work.

Major Findings.—(1) Grade-point averages and ACE Psychological Examination correlated at .59, significant at 1-percent level of confidence; (2) total problem scores and ACE scores correlated at .097, not significant; (3) grade-point averages and total problem scores correlated at .14, significant at 5-percent level; (4) problem scores in "adjustment to college work" area and grade-point averages correlated at .63, significant at 1-percent level.

Recommendations.—Reemphasis on intimate student-teacher relationship, with special faculty advisors for freshmen and more responsibility on the part of the faculty to offer more assistance, an organized program to assist freshmen in their adjustment to all phases of college life, and further related research.

SMITH, EDWARD JAMES. An experimental Study of the Problems and Attitudes of High School Athletes. (Ed. D., 1959, University of Colorado, Boulder.)

Director of study.—David C. Bartelma.

Problem.—First, to determine experimentally whether high school athletes showed improvement in their attitudes as the result of a self-adjustive coach-athlete conference approach to counseling. Second, to determine by corollary statistical analysis whether the

successfully counseled athletes differed, in the amount of attitude improvement shown, from the unsuccessfully counseled athletes. Third, to investigate the needs and problems of high school athletes in order to arrive at a workable guidance approach which athletic coaches could exploit.

Procedures.—The experimental population was composed of approximately 100 athletes attending Arroyo high school in San Lorenzo, Calif. The IAC Rating Scale was used to measure student attitudes, and the Mooney Problem Check List to survey student problems. The experimental variable used was a series of self-adjustive coach-athlete conferences, aimed toward the goal of self-realization and self-direction on the part of the athlete. In an attempt to validate the counseling approach for use by coaches in general, two coaches qualifying as untrained counselors were enlisted as coworkers in executing the experimental variable.

Major Findings.—The attitudes of the experimental group did not differ significantly from those of the control group (after the experiment). More than half of the counseling cases were rated as successful on the basis of the internal criteria. The two coaches untrained in the area of counseling and guidance enjoyed as high a ratio of success as the formally trained counselor. The writer concluded that attitudes or feeling toward basic concepts do not generally change as the result of an experience of this nature.

STONE, J. BLAIR. *Personal Factors Related to College Performance of Physically Disabled Male College Students.* (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Cecil O. Samuelson.

Problem.—To determine whether a group of disabled male college students could be distinguished from a group of physically normal male college students on the basis of scores on the Edwards Personal Schedule and data concerning age, marital status, cumulative grade-point average, and quarter in attendance at the University of Utah.

Procedures.—(1) A review of the literature. (2) A selection of the groups to be studied: (a) physical disability—on the basis of acceptability by the Utah Division of Vocational Rehabilitation for services under its program; (b) the normal college students—the norm group of male students used by Edwards to standardize his schedule from several State universities in western United States was considered the nondisabled group of college students with whom the disabled students were compared. (3) Administration of the schedule to the groups and a statistical analysis on the basis of data obtained from the schedule. (4) Statistical analysis in terms

of personal background information. (5) Compilation and summarization of the data.

Major Findings.—(1) The disabled group was approximately 4 years older than the non-disabled group, the difference being significant at the .01 level of confidence. (2) Significantly more disabled than nondisabled students were married, the difference being significant at the .05 level of confidence. (3) There was no significant difference between the disabled and nondisabled groups in terms of cumulative grade-point average. (4) The disabled group were, by and large, well along with their college careers. (5) The Edwards Personal Preference Schedule contained three variables showing statistically significant differences between the disabled male college students and the norm group. One of the variables, succorance, pointed out a significance at the .01 level of confidence, with the disabled group receiving the lower score. Two of the variables, exhibition and order, revealed a significance at the .05 level of confidence, with the disabled receiving higher scores on these variables than the nondisabled.

VAN GILDER, LIKE. *A Study of the Effect of Leisure-Time Use of Communications Media on College Academic Success.* (Master's, 1958, Marquette University, Milwaukee, Wis.)

Director of study.—Joseph Lina.

Problem.—To study relationships and determine predictive relationships among predictor variables and college G.P.A. Primary interest in value of ratings of students' choices for novel and magazine reading.

Procedures.—Multiple regression. Sample of college sophomores and juniors in initial courses in educational psychology.

Major Findings.—Multiple R of .817 between dependent variables of G.P.A. and the following dependent variables: (1) Speed of reading, (2) recall comprehension, (3) story-type comprehension, (4) and (5) ratings of preferences in novel and magazine reading. Multiple R of .53 between preference ratings alone and dependent variable. Concluded preferences are predictive for this group.

WILL, HELEN R. *Adolescents' Attitudes Toward Young Children.* (Ed. D., 1957, The Pennsylvania State University, University Park.)

Director of study.—A. M. Wellington.

Problem.—To examine the knowledge and attitudes which secondary students possess toward child behavior in everyday life situations as determined by rating scales.

Procedures.—Questionnaire and inventory, "Bringing up Children," administered at 9th, 11th, and 12th-grade levels in secondary schools of the Greater Hazleton area. Data

studied in light of following variables: (1) sex, (2) environment (urban or rural), (3) elementary school (public or parochial), (4) religious, Catholic or non-Catholic, (5) parental status, (6) character building organization, (7) younger siblings, (8) curriculum in which enrolled, (9) rank in class.

Major Findings.—Significant difference: 1-percent level between boys and girls, girls' score higher; 1-percent level, grade levels; 5-percent level, boys and girls who belong to character organization; 1-percent level, pupils enrolled in college prep highest curriculum; 1-percent level, area of religion.

The general principles of education, related to adolescent development in attitude toward bringing up children, as shown by this study are as follows: (1) Academic achievement is related to scores. (2) Experiences, such as religious activities and participation in character building organizations, are related by adolescents to attitudes toward bringing up children. (3) Results tend to support the idea of the cocurricula program. (4) Curriculum should be studied and revised constantly in order to meet the needs and challenges of youth.

WILSON, JOHN BRUCE. A Study of the Relationship Between Pupil Achievement and Working Patterns of School Principals. (Ed. D., 1955, University of Florida, Gainesville.)

Director of study.—Robert O. Stripling.

Problem.—To determine the influence in the principal's working pattern (democratic or authoritarian) upon the achievement of students in selected content fields, considering factors of socioeconomic status of pupil's parent, sex of pupil, age, years pupil has been enrolled in the same school, and pupil mental ability.

Procedures.—Sample 1,204 6th-grade pupils in 15 elementary schools in Hillsborough County, 695 supervised by democratic, and 509 by authoritarian principals. Principal Behavior Checklist. Test: California Achievement Test Batteries (arithmetic, reading, English), California Mental Maturity, Student Questionnaires on socioeconomic background, sex, age, etc. Analysis of following variables: (1) principals' operating pattern, (2) schools, (3) sections, (4) sex, (5) sex X schools, (6) sex X sections, (7) within variation, (8) total variation.

Major Findings.—Sex of student (girls showing higher achievement), and class in which student was a member influenced achievement in arithmetic, English, and reading. Students did not experience an advantage or disadvantage by being enrolled in a school supervised by a democratic principal. Further study recommended especially in determining community and school influence on principal behavior.

Administration

BARNES, RONALD EMON. Residence Hall Housing in Selected Colleges and Universities in the United States. (Ed. D., 1958, University of Colorado, Boulder.)

Director of study.—Clifford Houston.

Problem.—To gain information about current thinking and practices of housing officers in four areas of residence hall housing (planning and construction, financing, counseling, and management), in order to identify and describe current as well as possible future trends and developments; and to develop and set forth principles which may serve to guide the appraisal of residence hall facilities and programs.

Procedures.—A review of the literature, personal interviews with housing officers, and a questionnaire which obtained responses from housing officers representing 35 colleges and universities in the United States.

Major Findings.—Residence halls will continue to be constructed of varying sizes, but will be designed for small-group identifications, with planning and construction probably characterized by experimentation. An increasing number of colleges and universities are initiating counseling programs within their residence halls. The trend is toward centralizing the personnel and business operations of a residence hall under one person, who, in turn, reports to the business office and the dean of students' office. Housing committees probably will be utilized increasingly to perform advisory functions. The objectives of housing have broadened from the early American purpose of simply providing food and shelter to the present trend of supporting and implementing educational goals.

EMERY, CLIFTON W., JR. Cost of Guidance Services in Massachusetts Public Schools for the Year 1956-57. (1958, Tufts University, Medford, Mass.)

Problem.—To determine the amounts of money spent for guidance services in public schools in the Commonwealth; percentage of total school budgets; and per-pupil expenditures.

Procedures.—Questionnaire mailed to all guidance directors. The questionnaire was a refined version of one used in pilot study some years previously.

Major Findings.—(1) Dollars spent on guidance services have increased in the past several years. (2) Percent of total school budget utilized by guidance services has shown a very slight increase, which is also true of per-pupil expenditure. (3) Ranges of monies

spent vary immensely in cities and towns in the Commonwealth.

MACDONALD, JOHN MARSHALL, IV. A Survey of Student Registration Practices in Selected Secondary Schools of the United States. (Ed. D., 1959, Bradley University, Peoria, Ill.)

Director of study.—L.G. Bent.

Problem.—To determine the present practices involved in registering students for classes and to discover the basic underlying philosophies of the registration process.

Procedures.—Of the 471 questionnaires sent to 10 secondary schools in each State, 340 were returned, a percentage of 72.2. The data were analyzed by means of a punch card system.

Major Findings.—(1) The school day consists of six periods. (2) Pre-registration is held in the spring. (3) Registration bulletins are used extensively. (4) Most schools counsel students individually. (5) Registration is on a yearly basis. (6) An orientation procedure is employed for new students. (7) The high school principal is usually in charge of registration, with the homeroom teacher actually carrying it out. (8) Academic, vocational, commercial, and general curriculums are offered. (9) Parents are consulted by sending them the registration form. (10) Two majors and two minors, with 16 credits, are the most popular graduation requirements. (11) Most schools assign students to sections without consulting them. The philosophical attitude seems to be that the best form of registration is what is best for the student and what is most efficiently administered.

SYMMS, DOROTHY EUGENIA. Trends in Housing for Women Students and Implications for Educational Development through Housing Experiences. (Ed. D., 1957, University of Colorado, Boulder.)

Director of study.—Clifford Houston.

Problem.—To determine current trends in housing for women students in colleges and universities, and to analyze the findings in terms of implications for educational development through housing experiences.

Procedures.—The data were secured from two questionnaires distributed to (1) professional staff members affiliated with the National Association of Deans of Women, and (2) leaders of the Intercollegiate Association of Women Students. Data were reported by 40 student leaders and 238 professional staff women in institutions of various kinds and sizes in 44 States. The areas surveyed included administration, staff, services, facilities, student government, and student activities in residence halls.

Major Findings.—Administration of housing varies, but the most frequently used method

is for the personnel office and the business office to operate a dual administrative setup. Many institutions now part of a dual program do not recommend its continuance and a majority prefer a centralized program with a housing officer responsible to both offices. (2) Numerous residence halls are inadequately staffed and have personnel with limited training. (3) Present facilities and services only partly meet the needs expressed by both surveys. (4) Deans of women and student leaders favor greater participation by student government and activity groups in citizenship training and development of interpersonal skills through group interaction.

Counseling

APPEL, V. H. and C. J. KRAUSKOFF. A Descriptive Study of Persons Coming to the University Counseling and Testing Center From October 1, 1956 to June 30, 1957. (1957, The Ohio State University, Columbus.)

Directors of study.—F. M. Fletcher and H. B. Pepinsky.

Problem.—To describe the characteristics of persons coming to the University Counseling and Testing Center, and to compare these to the OSU population (student).

Procedures.—Data were taken from every fourth case of the approximately 1,700 students who came to the UCTC during the academic year 1956-57. Twenty-three variables were recorded from the Vocational Planning Form (background information), an abbreviated problem check list derived from the Mooney Problem Check List, the record of testing, and the counselors' notes. These data were punched into IBM cards, sorted, and a model description of a typical counselee was compiled. Three subpopulations were also studied: (a) OUR (out under rules) cases, (b) clients checking four or more problem areas on the check list, and (c) longer term clients, i.e., those who had three or more interviews with a counselor.

Major Findings.—Comparison of the UCTC group with the campus population indicated few major differences. Principally, the counseled group showed a greater proportion of males than would be expected, and a tendency for underachievers appeared more often than expected. Most of the clients were self-referred and they stayed for an average of two interviews. Approximately 70 percent of staff time was spent counseling clients rather than evaluating or testing cases. Findings for the subpopulations disclosed that longer term clients were more often girls, somewhat above the general population in measured general

scholastic ability. As a group, the OUR's were normally distributed on this variable. There appeared to be little difference between those who indicated more problems on the check list and the rest of the sample population.

ARNOLD, ELIZABETH. An Exploratory Study in Counseling Junior High School Students of the Seventh Grade. (Master's, 1957, Claremont Graduate School, Claremont, Calif.)

Director of study.—F. T. Perkins.

Problem.—To identify 7th-grade children entering junior high school who were having difficulty in adjusting to the school environment and, through individual and group counseling, to search for ways of improving their adjustment.

Procedures.—Counseling techniques were those available to a counselor within a particular school situation. Sources of data were teacher referrals, rating blanks, cumulative folders, school records, the Mooney Problem Check List, and the Wechsler Intelligence Scale for Children, anecdotal records, and sociograms. Techniques employed were individual interviews, counseling in small groups, parent conferences, teacher conferences, case conferences, referrals to the county speech consultant and psychologist referrals to outside agencies, and case histories.

Major Findings.—The children's troubles were longstanding, beginning in early childhood or during elementary school days. Behavior problems existed at home as well as at school, contributing factors being marital discord in the home, divorce or separation, parental attitudes not conducive to good mental health, sibling rivalry, the innate personality of the child, physical factors, and economic difficulties. Because of limited time available for counseling, only a few children were studied, making it impossible to obtain results for generalizations. The inauguration of a full-scale, small-group counseling program, supplemented by individual interviews, seemed, however, to promise beneficial results.

The inadequacy of separate elementary districts within a union high school district indicated the need for unification to equalize educational opportunities, minimize the transition from elementary to secondary schools, and introduce, in the kindergarten, curricular and guidance practices designed to prevent and control maladaptive behavior. The following steps were recommended: better communication to bring all teachers into the guidance program, inservice training for core teachers, and an improved and extended program of individual and small group counseling by a full-time, trained counselor.

BADZ, FRANCES ELKINS. An Evaluation of the Effectiveness of Counseling at the

Elementary School Level. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Clayton M. Ojerode.

Problem.—To (1) provide a counseling experience for a select group of elementary school children with adjustment problems, and (2) evaluate, according to specified measuring instruments, the effectiveness of the experience.

Procedures.—Fifteen elementary school children, comprising the experimental group, experienced a combination of individual and group counseling, averaging 10 sessions per child, over a 3-month period. A closely matched control group experienced no systematic counseling. Pupils from both groups were referred by their teachers on the basis of adjustment problems. The effectiveness of the counseling experience was evaluated according to the following measuring instruments: (1) Rogers' Test of Personality Adjustment, (2) Problem Check List, (3) teacher rating, a 10-point scale, and (4) peer-group rating, a sociometric device. Average differences between the before and after measures for each group were tested for significant changes. A brief description of each child counseled followed the statistical analysis of the data.

Major Findings.—As a group, counseled children changed significantly toward improved adjustment according to Rogers' Test of Personality Adjustment. Greatest change for the experimental group occurred in the daydreaming subscore of Rogers' Test. No significant difference occurred in the teacher rating for either group. Peer-group rejection increased for both groups.

BERGSTRESSER, JOHN, MORT RENSHAW, EVERETT CHANDLER, and HUGH BELL. Report of the Subcommittee on Counseling in the California State Colleges. (1957, California State Colleges, Sacramento.)

Director of study.—Hugh Bell.

Problem.—To determine the basis for deciding how many college counselors are required per 1,000 students and what should be their load.

Procedures.—Questionnaire study of other colleges and universities. Analysis of 23,000 counseling interviews collected over a period of one school year.

Major Findings.—(1) One counselor per 1,000 regular students seems to be the pattern in other States, but 2 per 1,000 is considered desirable. (2) Conclusions from study of interviews: (a) It is impossible to determine how many counselors are needed from a study of a given college, unless optimum counseling services are available, or the demands for counseling are influenced by the quality and availability of the services. (b) The average time counselors take for different kinds of interviews varied: educational, 81 minutes; vocational, 36 minutes; personal, 51 minutes.

(c) Over 85 percent of the 23,000 interviews were conducted with persons who came voluntarily. (d) The subcommittee recommends 1.5 counselors per 1,000 regular students.

GUIDRY, ARREADER PREMIAUX. A Survey of the Methodology for Evaluating the Counseling Outcomes. (Master's, 1956, Prairie View Agricultural and Mechanical College, Prairie View, Tex.)

Director of study.—W. L. Cash, Jr.

Problem.—To determine the criteria employed in evaluating counseling outcomes.

Procedures.—The following questions were asked: (1) What is counseling? (2) Who serves as evaluator—the client, the counselor, both the client and counselor, or others? (3) What methods of assessment and evaluation have been employed in studying counseling outcomes and have proved beneficial? (4) What are the criteria used in evaluating counseling outcomes? (5) When is counseling effective?

Major Findings.—(1) Criteria used in the various approaches in counseling have the following in common: (a) feeling reaction, (b) student satisfaction, (c) working relationships, (d) positive feeling toward self in the form of self-direction and self-encouragement. (2) There was no best method of evaluating counseling outcomes. (3) The lack of suitable criteria makes evaluation of data difficult. (4) All persons interested in counseling urge that all counselors go into research so that more adequate methods for the evaluation of counseling outcomes may be discovered.

HELDRICH, NANCY RUTH. A Study of to Whom Students Go for Counseling and the Factors Which Influence Their Decisions. (Master's, 1957, Whittier College, Whittier, Calif.)

Director of study.—Paul Albrecht.

Problem.—To discover where college students go when they have problems, and the factors which influence them in the selection of those in whom they choose to confide.

Procedures.—The sample consisted of 121 women and 108 men students at Whittier College, who filled out questionnaires. A code of the major responses was devised in order to express findings in terms of percentages of positive responses, and attempt was made to include a qualitative analysis on certain items.

Major Findings.—In general, students tend to take their problems, particularly those which are personal and subjective, to close friends. Reasons centered around the personal characteristics of these persons and their close relationship. In relatively objective and impersonal problems, students

tend to choose college personnel and professional people, whom they perceive as possessing qualities of knowledge and training, but they do not seem to associate them with qualities of warmth, personal interest, or genuine concern. The advantages of counseling with peers were that these persons, having the same problems, are easy to communicate with understandingly. The major quality admired in a counselor is that of responsiveness, variously expressed as warmth, as a genuine interest, and as a willingness to help.

HILLARD, CHARLES E. An Experiment in Counseling Junior High School Students and Their Parents in Making College Decision. (Ed. D., 1958, University of Pittsburgh, Pa.)

Director of study.—P. W. Hutson.

Problem.—To determine the effect of a program of counseling junior high school students and their parents, designed to bring the college decision of these pupils into agreement with their potentialities for college success.

Procedures.—Established 102 pairs of 8th- and 9th-grade pupils in a consolidated rural high school, matched on a combination basis of grade, sex, IQ, academic achievement, and social class. Counselor one group (called experimental) and their parents, with special reference to the college decision, making extensive use of probability tables, of which one was based on 72 graduates of the school who had gone to college, thus relating junior high school scholarship to college scholarship. The other group (control) was not given the carefully planned counseling program.

Major Findings.—The criterion of the success of the experiment was the answer to the question: Do the members of the experimental group (who state their intentions of going to college) excel the members of the control group (who say they plan on college) in IQ, in standing on pertinent tests of the Differential Aptitude Tests, and in junior high school scholarship? At the end of the year the members of the control group stood as follows with reference to college decision: 30 chose college, 48 were uncertain, and 24 chose not to go to college. Corresponding numbers for the experimental group were: 25 going to college, 16 uncertain, and 61 not going to college. Members of the experimental group who planned to go to college had an average IQ of 101 and members of the control group had an average IQ of 112. Similar differences between the two groups prevailed in scores on the DAT and in junior high school marks.

MUNOZ, ROSALIO F. Differences in Dropout and Other School Behavior Between Two Groups of 10th Grade Boys in an Urban High School. (Ph. D., 1957,

University of Southern California, Los Angeles.)

Director of study.—Earl F. Carnes.

Problem.—To determine whether intensive counseling upon a group of 10th-grade boys would make a difference in their attitudes, academic achievements, dropout rate, school marks, participation in extracurricular activities, educational and vocational plans, school, home and community relations.

Procedures.—Two groups of 48 10th-grade boys were matched. One group participated in a regular guidance program. The other received intensive counseling help. They were compared on the characteristics described in the purposes after a full year in the program.

Major Findings.—The counseling program brought about changes in behavior among both dropouts and nonleavers. Participants in the program showed higher academic achievement and more acceptable school behavior for the nonleavers, and more realistic planning and ability to follow through on plans for the dropouts. The counseling program brought about changes in the opinions and attitudes expressed by students, parents and teachers regarding the students' school behavior.

NIXON, CLIFFORD LEE. Neglected Problems in High School Counseling. (Ed. D., 1956, University of California, Berkeley.)

Director of study.—Clifford P. Froehlich.

Problems.—To discover whether certain types of problems are neglected in high school counseling. (It is hypothesized that problems related to health, boy-girl relations, and morals or religion received less emphasis than other problems.)

Procedures.—Data from the counseling program, demonstration secondary school, University of California summer session, 1954, were examined. Student scores on the SRA Youth Inventory, student and counselor reports of 494 interviews with 198 students, and transcripts of 94 interviews with 37 students. Assuming special reason for emphasis on the areas, "My School" and "After High School," the emphases given in the counseling sessions (as indicated by references in the reports and transcripts) are compared with emphases on the other six areas of the inventory. This emphasis was then considered in the light of problem areas checked, number of problems checked, and centile scores on the inventory.

Major Findings.—In eight of nine comparisons, significantly less emphasis is given to "Things in General," dealing chiefly with problems of a moral or religious nature, according to the findings from a chi-square test. The various tests give somewhat conflicting findings as to the other problem areas. Each

of the six personal emotional problem areas is sometimes neglected, but much greater emphasis is given to "My Home and Family" in the counseling sessions. It is possible that the areas "Boy Meets Girl" and "Health" are more neglected than the areas "About Myself" and "Getting Along With Others." Other findings show less emphasis on problems classified as moral than on those classified as religious, and less emphasis on problems related to sex or marriage than on problems of social contact between the sexes. Four factors seem related to freer discussion of areas: Increased emphasis on areas occurs when (1) the student and counselor are of the same sex, (2) the series of counseling interviews is continued to four or more, (3) the counselor is experienced as well as trained, and (4) the counselor has training in a field related to the problem area.

SAGEHORN, HOWARD T. A Study of Adolescent Perceptions of Guidance Roles of Classroom Teachers and Counselors. (Master's, 1957, Claremont Graduate School, Claremont, Calif.)

Director of study.—Donald McNamur.

Problem.—To discover the guidance roles and limitations of teachers and counselors as viewed by students.

Procedures.—An instrument of 26 items, representing some of the developmental tasks in adolescence, covered the areas of educational planning, vocational planning, personal planning and social planning. A total of 408 students responded to the instrument, including boys and girls from the 8th, 10th, and 12th grades.

Major Findings.—In general, adolescent girls perceive teacher and counselor guidance much the same as do the boys. Eighth-grade boys favor teacher guidance for help with vocational, personal, and social problems, while the girls favor counselor guidance. Marked agreement is noted in the 10th-grade boys' and girls' response to teacher and counselor guidance. More 12th-grade girls than boys prefer taking their vocational, personal, and social problems to counselors for guidance help. Teachers receive their strongest vote from students for help on problems related to study habits, local and national political issues, and understanding difficult school subjects. Students look principally to counselors for help with the selection of school subjects and vocational information. Adolescents seem to prefer taking their marriage, boy-girl relationship, and body development problems to persons other than teachers and counselors, or not taking them to anyone. A few students seek help from both teacher and counselor in all areas covered by the survey instrument.

SIMER, CHRISTINE P. An Experimental Study of the Effects of Counseling in

Freshman Halls. (Ed. D., 1956, Florida State University, Tallahassee.)

Director of study.—Harold F. Cottingham.

Problem.—To determine whether the effect of "more intensive counseling" as an independent variable in a residence hall results in modification of individual behavior which can be measured by using appropriate methods of assessment.

Procedures.—(1) Two equated groups of freshman women students were identified, one as control receiving normal counseling, one as experimental receiving more intensive counseling. (2) MMPI used as pre- and post-test of personality. (3) Case studies were used as subjective devices for analyzing behavioral change.

Major Findings.—(1) Objective measurement of differences in behavior of the two groups seemed to be the result of chance, but the use of the instrument seemed to increase the effectiveness of counseling with the "more intensive counseling" group. (2) Analysis of case studies seemed to indicate that effective counseling can result in changes in individual behavior which are apparent.

WILL, CAROLINE F. A Survey of Problems Confronting Frear Hall Residents. (1957, University of Hawaii, Honolulu.)

Director of study.—Arthur A. Dole.

Problem.—Women residents of the largest dormitory on the University of Hawaii campus were administered the MPCL in order (1) to screen out those who might profit from counseling, (2) to locate problems most prevalent among the residents, (3) to stimulate an objective approach to their problems, and (4) to obtain normative information for use by the Office of Student Personnel.

Procedures.—Of the total resident population, 128 persons, or 92 percent, were tested in one evening at the dormitory. The checklists were scored and the following analyses made: (1) percent of residents making the most frequent number of responses in any of 11 problem areas, by college year; (2) items or problems checked by one-fifth or more of the total group, and (3) percent of positive responses made about the checklist and about counseling.

Major Findings.—(1) Adjustment to college work, social-recreational activities, and personal-psychological relationships were the three areas checked most frequently by the total group. The areas of least concern were finances, living conditions and employment, morals and religion, and courtship, sex, and marriage. (2) Freshmen were most concerned about adjustment to college work, the proportion decreasing with length of time in college; and seniors about the future, vocational and educational areas being of most concern to them. (3) Two-thirds responded

positively to the value of completing the checklists. Five-sixths replied that the items gave a well-rounded picture of their problems. (4) Of the 41 percent who indicated a wish to talk about their problems with someone on the faculty, 81 percent did not know with whom they wished to talk. (5) By the end of the school year, 32 percent of those desiring counseling had responded to an invitation to come to the Bureau of Testing and Guidance.

WOLFORD, HELEN G. The Value of Counseling in the Psychological Adjustment of a Group of Women Surgical Patients. (Master's, 1957, San Francisco State College, Calif.)

Director of study.—Virginia Lee Block.

Problems.—To determine whether bedside counseling would be an effective method of assisting patients in their adjustment to illness.

Procedures.—Experimental and control groups, daily reaction sheets to both groups, counseling with experimental groups, statistical analyses of items to test general feeling, daily reaction sheets, clinical analysis of data, daily check sheet, and interviews.

Major Findings.—Although the sample was small, counseling did appear to have a positive value in helping the groups of female surgical patients studied to make healthier psychological adjustments. Implications were that counseling in general hospitals has a potentiality of: (1) rendering patients with negative attitudes more amenable to therapies prescribed by the physician; (2) improving their personal relationships with other patients and with hospital personnel, thereby preventing conflicting situations which create unhappy contagious effects upon other patients and upon ward personnel; (3) increasing the economy of nursing personnel by enabling them to use their time with patients more positively and effectively.

Efforts to minimize patients' tensions and anxieties should subsequently have a healthy psychological effect also on the hospital personnel. They, being happier, would in a sense transfer their feelings to the patients in the form of increased gentleness, patience, and understanding.

Dropouts

BAER, JEAN HITCHCOCK. Study of Certain Selected Factors Related to the Persistence of Liberal Arts Students at the State University of Iowa. (Ph. D., 1958, State University of Iowa, Iowa City.)

Director of study.—Kenneth B. Hoyt.

Problem.—To explore the relationship between certain factors and the persistence of liberal arts students who entered the State University of Iowa as freshmen in September 1953. To ascertain the degree to which selected factors in the students' personal and educational backgrounds, that could be ascertained before admission, contributed to the prediction of persistence.

Procedures.—Data were gathered from 909 freshmen who enrolled in liberal arts in the fall of 1953. At the end of 4 years these students were divided into a persistent group of 452 and a withdrawal group of 457. From these larger groups were drawn two extreme groups of 208 who dropped out within a year, and 327 who graduated in 4 years or less. A discriminate function analysis was made separately by sex for the smaller groups. Analysis of data for the total group was made by t-test and chi-square methods.

Major findings.—(1) Net mortality was 40 percent; 36 percent graduated and another 12 percent were potential graduates of State University, while 12 percent transferred to other institutions. (2) Those who persisted, both men and women, had higher high school grade averages, higher placement composite scores, and planned a greater number of years of education than did dropouts. (3) Early dropouts and graduates among men and women could be distinguished by high school grade averages and placement test scores, while among women these same two factors, and also years of education planned, were distinguishing factors. (4) Certainty of vocational choice was not a useful distinguishing factor for either sex. (5) Two-thirds of the attrition occurred by the end of the freshman year.

BELL, DORIE M. Some Characteristics of Students Who Withdrew From West High School in Salt Lake City, Utah in 1957. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Horace W. Lundberg.

Problem.—To determine why students were leaving high school before graduation, to obtain some of their characteristics, and to determine what happened to them after leaving high school.

Procedures.—Personal interviews with the students; study of school and juvenile court records; their use of counseling; their educational plans.

Major Findings.—Poor attendance characterized most of the dropouts; 60 percent were below the sigma index score of 95; the school did not meet the needs of those students who had ability; most of the dropouts had juvenile court records while in school and these difficulties increased after leaving school; 76 per-

cent were boys; most of the students were uncertain of their reasons for leaving school.

CARRINO, CAESAR A. A Study of Elimination From Norton High School From September 1, 1954, to January 1, 1958. (Master's, 1958, The University of Akron, Ohio.)

Director of study.—William I. Painter.

Problem.—To determine the effects of the following factors on eliminations from Norton high school: (1) family background, (2) intelligence quotient, (3) sex of the pupil, (4) marks earned while in school, (5) correlation between ability and achievement, (6) courses the dropouts considered least necessary in the curriculum, (7) reading disabilities, (8) marriage (pregnancy), (9) domestic status of family, (10) attendance.

Procedure.—The author collected data from permanent records, personal interviews, teachers, administrators, and other interested personnel; reviewed literature; collected data from permanent record cards regarding the home background, place of birth, etc., of students who graduated during this period; and compiled all data on one master sheet.

Major Findings.—Only 18 percent of the total student enrollment in grades 7-12 dropped out of Norton high school during the period September 1, 1954, to January 1, 1958. Of the 72 students who dropped out of school before their senior year, only one-third dropped out before their sophomore year, while well over half dropped out during the 10th and 11th year. An almost equal number of dropouts were born in Ohio as in West Virginia, a contradiction to the author's original assumption.

DEFALIO, EUGENIA. Life Adjustment Education in the Secondary Curriculum. (Master's, 1957, Marywood College, Scranton, Pa.)

Director of study.—Edward Tomaszewski.

Problem.—To study the number of dropouts from the 1956 graduating class of Dunmore High School, to determine the causes of these dropouts, and to point out how a "Life Adjustment" type of high school curriculum might answer some of these problems.

Procedures.—Use of school records; survey of occupations of parents; Otis Test of Mental Maturity administered to 1956 graduates in sophomore year; followup study of 1956 graduates.

Major Findings.—Greatest number of dropouts found to be in 10th grade. Suggestions offered for a varied and flexible curriculum to meet individual needs. Follow-up studies on graduates reveal a high rate of early marriages among the girls, and entrance into the armed services and into office work as the most common occupational choice of boys.

FELDMAN, ESTELLE E. Dropout Report, New Haven Public Schools, New Haven, Conn., 1957.

Director of study.—Estelle E. Feldman.

Problem.—To determine whether the dropout follows any given pattern.

Procedures.—Cards for dropouts were compared for the year 1950-51 and 1955-56 for (1) total number of dropouts, (2) sex, (3) course pursued, (4) last grade attended, (5) age on leaving, (6) test scores, (7) ecological areas, (8) personality traits, (9) number holding jobs on leaving, (10) kinds of jobs, (11) vocational interest, and (12) reasons for leaving.

Major Findings.—The dropout pattern may be described as follows: A male, near his 17th birthday, whose work habits are apt to be below average; who lives in a poor ecological area; who is somewhere near the 50th percentile in ability to learn (according to test scores); who is enrolled in either the general or business course and whose interest in school and study is likely to be superficial. What vocational interest he expresses does not fit reality as measured by the type of job he receives when he leaves school.

GREEN, DONALD A. Study of the Relationship Between School Persistence and Grades, Ability and Achievement of Secondary School Pupils. (Ph. D., 1958, Iowa State Department of Public Instruction and State University of Iowa, Iowa City.)

Directors of study.—L. A. Van Dyke and K. B. Hoyt.

Problem.—To investigate differences in intelligence test scores, high school grade-point averages, achievement test scores, and elementary grade-point averages for the samples of dropouts and persisters from Iowa secondary schools. A supplementary investigation conducted to study the differences between the talented dropout and the talented persister with respect to the above variables.

Procedures.—Examination of school records, personal interviews with school personnel, examination of records of the Iowa Testing Bureau. Sample: A representative sample of public high schools in Iowa, stratified by size, and a representative sample of the total group of students who entered the 9th grade in September 1950, 1951, and 1952. Analysis of the data: Intelligence, high school grade-point average, scores on Iowa Tests of Educational Development (achievement). Analysis of variance using the Lindquist Type VI design: Elementary grade-point averages, chi square test of independence. For the best combination of factors characteristic of a dropout, a multiple biserial correlation. Difference between the mean scores of the two talented groups, *t* ratio.

Major Findings.—(1) Dropouts as a group can be differentiated from the persisters as a group in mean scores on the basis of intelligence quotients, high school grade-point averages, elementary school scholastic record, and each subtest of the Iowa Tests of Educational Development. (2) Male dropouts as a group can be differentiated from male persisters as a group in mean scores using intellectual factors alone. Female dropouts can be differentiated from female persisters better when nonscholastic measures of absence and extracurricular activities are added to the regression equation. (3) There appears to be no difference between schools of different sizes with respect to mean scores on the intellectual and scholastic factors used in this investigation. (4) Talented dropouts can be differentiated from talented persisters in mean scores on the basis of high school grade-point average and participation in extracurricular activities, but not in terms of the Composite Score on the Iowa Tests of Educational Development, occupational status of the father, or absence ratio.

JOHNSON, A. PEMBERTON and ENTWISLE, FRANK N. Measured Characteristic of Engineering College Failures, Class of 1960. (1958, Newark College of Engineering, Newark, N.J.)

Director of study.—A. Pemberton Johnson.

Problem.—To learn by what test scores engineering students at Newark College of Engineering, who voluntarily withdrew or were dropped for scholastic failure in their first year-and-a-half, differed significantly from their entire September 1956 entering class.

Procedures.—Comparison of preadmission College Board Scholastic Aptitude Standard Ratings (the 200 to 800 scale) and raw scores on five post-admission (orientation) test scores for failures and withdrawals as of the end of the first semester. Since no statistically significant difference was found, these data were combined, then further combined with all failures through the end of the third semester. Fisher's *t*-test of significance of the differences in means was applied (assuming the class mean to have no variability since it included all members of the class for whom test scores were available—the failures were a sample of that population).

Major Findings.—The combined failure withdrawal group averaged significantly lower scores (at the 1-percent level—single tail test) than their classmates on four tests, listed in decreasing order of the significance of the difference: Cooperative Intermediate Algebra and College Ability Test—Quantitative score. College Board Scholastic Aptitude Test—Mathematical score, College Ability Test—verbal score. No statistically significant difference in interest test (Kuder Preference Record) scores was found. Interpretation: A good background in intermediate algebra.

and good arithmetic computational and reasoning skills, along with some verbal ability, are important for scholastic success at Newark College of Engineering.

KIRBICK, ANNE K. Dropouts in Schools of Nursing: The effect of Self and Role Perception. (Ed. D., 1958, Harvard University, Cambridge, Mass.)

Director of study.—David V. Tiedeman.

Problem.—To investigate the effect of self-concept and role perception on the withdrawal of students from seven selected schools of nursing. (The dependent variable is the dropout from the schools, and the independent variables are self-concept, role perception, motivating factors, anticipated adjustment and the socioeconomic background of the students.)

Procedures.—Eight instruments were concerned with the nursing student's knowledge about the nursing program; her activities, her relationships with selected others in the hospital situation, her concept of the role attributes of the nursing student, her self-concept, motivation, anticipated adjustment and socioeconomic background. The first four instruments were administered to 538 freshman nursing students and 80 selected faculty members. The latter were asked to respond to the role-perception instruments to provide a standard for judging the accuracy of the student's perception of the role.

An attempt was made to assess the effect upon continuation in the school of consensus between superordinates and incumbents on role expectations; between the student's self-concept and her role attributes concept; between the student's concept and the faculty's role attributes concept; and in addition, the effect of the student's anticipated adjustments, her socioeconomic background and certain aspects of motivation. The significance of the items on the instruments in distinguishing students who withdrew from those who remained was determined.

Major Findings.—Significant correlation was shown between the extent of the incumbent's agreement with the superordinate's expectations of the role and continuation in the program. The importance for continuation of perceiving realistically segments of the role varied significantly. The segment which seemed to have the highest contribution to the prediction of the dropout was concerned with role attributes; and the least important segment, with the activities performed. The student was more likely to remain if her self-concept coincided with the faculty's role-attributes concept; whereas the concurrence between the student's self-concept and her own role-attributes concept was less important. The most important aspect of motivation for continuation was source of information about nursing and the least important, the priority of choice of nursing as a career.

Definite personality characteristics were more compatible with remaining in the program than were other characteristics. Significant needs among the group who remained were a nurturance, a achievement, a cognizance, a conjunctivity, a deference, and a sameness. Significant among the group who withdrew were in a aggression, a abasement, a deliberation, a exposition, and a rejection. Significant factors in the socioeconomic background were the parent's education, occupation, and income. No relationship appeared between difficulty anticipated and continuation in the nursing program.

RIDENOUR, CLYDE E. An analysis of the Dropouts in Grades Nine Through Twelve in the Rochester Public School System. (Master's 1956, The Colorado College, Colorado Springs.)

Director of study.—John S. Jordan.

Problem.—To attempt to discover why Rochester pupils were leaving school and to make a comparison of the Rochester dropout problem with dropout problems at schools throughout the Nation and the state of Minnesota.

Procedures.—A uniform data sheet was used to record the information secured from the accounting office, files of the office of the high school principal, and from teachers and parents of the students. This information was compared with statistics taken from state and national educational publications.

Major Findings.—The rate of dropouts from the Rochester public school system was found to be considerably lower than that of the State of Minnesota and the national average. Various possible explanations of these differences were considered, and suggestions made for improving the situation in the Rochester schools.

SCHNIER, EMIL J. The Junior College Dropout. (Master's, 1958, Claremont Graduate School, Claremont, Calif.)

Director of study.—Arthur R. King.

Problem.—To investigate the problem of premature terminations of programs of study at San Bernardino Valley (Junior) College.

Procedures.—A questionnaire devised for San Bernardino Valley College dropouts and available cumulative records. Dropouts were asked to fill out the questionnaire before they were given final clearance for leaving. The data were in part compared to data furnished by stay-ins.

Major Findings.—Lack of funds was the main cause for dropouts. It appeared reasonable to assume that dropouts received little or no economic support from home. Illness, leaving town, and entering the service were next, in the order given, as contributing causes for the premature departure. Family size was

not found to be a significant factor in the study; however, among those who eventually graduated, members of medium-sized and smaller families appeared to dominate. Extracurricular activities were not welcomed by dropouts. One-third the number of dropouts occurred within four weeks of registration. Whereas most students who continued their education had more adequate records in their files, the dropout was lacking in them. Dropouts seemed more oriented toward the immediate and practical rather than the long-term possible beneficial results of continued education.

TWESME, RUSSEL. A Comparison of the Dropout Records in Senior High School With Pupils From Junior High School and Eighth Grade. (Master's, 1958, University of Wisconsin, Milwaukee Campus.)

Director of study.—A. A. Reany.

Problem.—To find out if the junior high school has an effect on the holding power of the senior high school.

Procedures.—An analysis of records for a 7-year period. Total population of 467 withdrawals was examined.

Major Findings.—(1) Junior high school has no effect on holding power of senior high school; (2) largest number of withdrawals at age 16 and grades 10 and 11; (3) senior high school program better suited for girls than boys; (4) intelligence of student plays an important part in staying in school.

WEINTRAUB, JEROME IRVING. An Investigation of the Post High School Plans of Selected 1956 Graduates. (Master's, 1958, San Diego State College, Calif.)

Director of study.—J. Sherrick Fisher.

Problem.—To determine the number of 1956 high school graduates from seven San Diego and three Grossmont district high schools who were qualified to go to college but had no plans to do so; to determine the reasons why these graduates had not planned to continue their education; and to analyze the returns from questionnaires and interviews on why these qualified graduates were not going to college.

Procedures.—Graduates (346 in number) selected had an IQ above 110 and a grade-point average above 1.5; or an IQ between 90 and 110 and a grade-point average above 2.0; and had not indicated, before graduation, plans to attend college. A questionnaire was sent to determine whether they had made plans to attend college (if not, why) and whether they had definite plans to attend college at a later date. An interview of 106 of the selected graduates followed, and 91.4 percent of the questionnaires were returned.

Major Findings.—Of the students responding, 134 were planning to attend college or were attending, comprising 62.7 percent of the boys and 28.7 of the girls. Primary reasons for not planning to attend college were jobs, marriage, financial, military service, "just tired of school," and other reasons.

WETELER, HELENE. Diplomat or Dropout: A Study of Nonintellectual Factors in Relation to College Student Attrition. (Master's, 1957, Cornell University, Ithaca, N.Y.)

Director of study.—A. Gordon Nelson.

Problem.—To isolate certain nonintellectual factors related to college student attrition.

Procedures.—Statistical comparison of a group of college dropouts with a group of graduates, the groups being matched on the basis of sex, college, class, and cumulative scholastic average.

Major Findings.—(1) Male graduates tend to join fraternal organizations significantly more often than dropouts; no difference found for females. (2) Withdrawal for nonintellectual reasons seems to be symptomatic of basic personal dissatisfaction and extreme self-criticism. (3) Female dropouts tend to participate in fewer extracurricular activities than their counterparts who graduate. (4) Students who graduate have better educated fathers than do withdrawers.

Followup

ARNOLD, DWIGHT L. and DEAN HUMMEL. Followup of Graduates of Counselor Training Program at Kent State University. (1958, Kent State University, Kent, Ohio, and the Ohio State Department of Education, Columbus.)

Director of study.—Dwight L. Arnold.

Problem.—To secure graduate reactions to the counselor training program at Kent State University.

Procedures.—A questionnaire was sent to 130 persons with an 85-percent response.

Major Findings.—Thirty-four percent of the graduates were in full-time graduate work and 58 percent in more than half-time guidance work; and 77 percent were certified as school counselors. The strongest feature of the program was the counseling practicum. Counseling procedures and testing were rated as strong.

CASS, DAL HOLDER. A Study of Upper Quarter High School Graduates for 1956 From Three Colorado Counties Who Did

Not Enroll in College. (Ed. D., 1957, University of Colorado, Boulder.)

Director of study.—Dorothy Sherman.

Problem.—A study of upper quarter high school graduates for 1956 of Boulder, Weld, and Morgan Counties, Colorado, to determine the reasons these graduates did not go to college; to obtain case histories exemplifying the reasons; to compare lack of finances with lack of motivation as deterrents to college attendance; and to determine the amount of assistance required by graduates who would have gone to college if adequately financed.

Procedures.—Of 105 questionnaires mailed, 104 were returned. Personal interviews were conducted with approximately 15 percent of the respondents in order to check consistency of questionnaire responses and to obtain information for case histories.

Major Findings.—The major reasons for not going to college, in rank order, were lack of finances, marriage, selection of a vocation not requiring college, lack of interest, indefinite plans after graduation, and entering the armed forces. Approximately 41 percent would have gone to college if adequately financed, but 54 percent of the boys would have gone as compared with 37 percent of the girls. The average graduate who would have gone to college if adequately financed would have required \$744 for an academic year—the average boy, \$544; and the average girl, \$817. They were from a lower socioeconomic level but reported a more favorable parental attitude toward college attendance than graduates who would not have gone. Schools and school guidance and counseling programs should give more attention to parent education and should give students the necessary information on which to base educational and vocational choices. Future plans of grade and high school students should be studied to identify those with plans not consistent with their capabilities, and every possible financial assistance should be made available to capable graduates who would go to college if adequately financed. Any program of financial assistance should be administered on an individual case basis.

DELBERT, JOHN SAMPSON. Academic Behavior Patterns of Students Who Completed Baccalaureate Degrees at the University of Denver in 1955-56. (Ph. D., 1957, University of Denver, Colo.)

Director of study.—Daniel D. Feder.

Problem.—To analyze the success of Bachelor of Arts candidates in terms of level of achievement, extracurricular activities, change in departmental majors, and changes in colleges from original enrollments.

Procedures.—Data collected from registrar's office and from University Testing Bureau on 666 University of Denver students. Cards

made for each student, punched to permit machine handling for statistical purposes.

Major Findings.—(1) Continuous students achieved higher than students whose programs were interrupted. (2) Over 75 percent of the students changing major studies changed only once. (3) No relationship was apparent between general patterns of persistence and change or nonchange of major study area. (4) Older students achieved higher than younger students. (5) Students engaging in extracurricular activities tended to be higher achievers. (6) Differences between native and transfer students generally were insignificant.

DIXON, DAVID ROBERT. A Study of Factors Related to College Non-Attendance in Superior High School Graduates. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Cecil O. Samuelson.

Problem.—To examine, through statistical analysis of questionnaire data, qualitative analysis of interview protocols, and analysis of published statistical data, the factors associated with college nonattendance in superior high school graduates.

Procedures.—Of the 300 participants from 25 high schools, 243 or approximately 80 percent returned completed questionnaires, 193 in the college-attending group and 50 in the non-attending group. The responses of the two groups were compared by means of the t test for significant differences between two percentages, and the chi-square test for significant differences between multiple categories. Nine items were found to differentiate between the two groups at the .01 and .05 levels. In order to discover attitudes and configurations which may not have become apparent via statistical analysis of questionnaire data, 80 student participants were interviewed by using the semistructured interview technique. The data obtained from the questionnaire analysis and the case studies were evaluated together in an attempt to shed light upon the factors associated with college nonattendance in superior high school graduates.

Major Findings.—The following items failed to differentiate between the two groups at statistically significant levels: (1) previous interest in college attendance; (2) attitude toward marriage as a barrier to college attendance; (3) attitude toward relationship between college and financial success; (4) attitude concerning the possibility of financing college education with suitable part-time employment and the ability to live away from home; (5) the relationship between the work required to obtain a college education and the value of such education; (6) the ability of college professors to compete in other fields; (7) the utility of a college education in the service of one's fellow man; (8) the ability of college graduates to solve practical prob-

lems; (9) the utility of the college curriculum; (10) belief in the availability of college scholarships; (11) belief in the adequacy of college scholarships; (12) attitude toward the use of Federal funds to provide scholarships for superior students otherwise unable to attend college.

DOUD, DONALD HOYT. The Academic Success of Keystone Junior College Engineering Transfer Students in the Engineering Curriculum of Six Senior Colleges, 1946-52. (Master's, 1957, University of Scranton, Scranton, Pa.)

Director of study.—Lawrence J. Lennon.

Problem.—A followup study to determine the degree of success or failure of preengineering students at Keystone Junior College who transferred to six senior colleges.

Procedures.—Followup; data analysis.

Major Findings.—During the years 1946-50, 113 men finished this junior college in pre-engineering. Of these, 92 transferred to a senior college, 8 were not graduated from the senior college, and 14 entered 13 different senior colleges. This meant that only one or two of the junior college graduates were found at each of these schools, hardly enough to draw conclusions. Seventy students were located at six senior colleges. The mean grade-point average of this group while at Keystone was compared with the means of each group at the senior colleges (after correction) and the increases or decreases noted. In five of the six senior colleges an increase was noted, but only in two of the senior colleges was the size of the increase significant.

ENGELBRECHT, GLADYS. Scholastic Success of Students Changing School or College Within the University of Connecticut. (Ph. D., 1958, University of Connecticut, Storrs.)

Director of study.—Edward A. Wicas.

Problem.—To attempt to predict scholastic success for students changing school or college, to compare changed and nonchanged students on scholastic aptitudes and achievement, and to determine the extent of within-university change of school or college through a sampling at the University of Connecticut and other colleges and universities in the United States.

Procedures.—Data from 73 universities and colleges were secured by a questionnaire survey. Data for the University of Connecticut were based on freshman entrants of September 1950, 1951, and 1952. T-tests of mean differences between changed and non-changed students were made on high school percentile rank, the Ohio State University Psychological Examination, ACE Psychological Examination, Cooperative English Tests of Mechanics of

Expression and Reading Comprehension, and first semester quality-point ratio. Using criteria of graduation-nongraduation, and terminal passing-nonpassing marks, point biserial coefficients of correlation were computed for each of the foregoing variables, the cumulative quality-point ratio.

Major Findings.—Of freshman entrants to the University of Connecticut, 21.7 percent changed school or college, and a similar percentage in other State universities and colleges. By the end of the fourth semester, 92.3 percent of the changes (excluding those to the School of Education) had occurred. Differences between changed and nonchanged students in rate of graduation, as well as significant differences in scholastic aptitude and achievement, favored the changed students. High school percentile rank and scores on the foregoing tests of scholastic aptitude and achievement were found to be of little value in predicting success of students changing school or college. The three quality-point ratios correlated most substantially and consistently with the criteria. Depending upon the particular combination of schools, or colleges changed from and into, considerable variation existed in the predictive value of these quality-point ratios. They were most predictive of success of students changing from the School of Engineering to the School of Business Administration.

FLETCHER, F. M., F. R. PETERS, and D. O. HERMAN. A Study of the Possible Effect of the New Ohio State University Point-Hour Ratio Standards. (1957, The Ohio State University, Columbus.)

Director of study.—

Problem.—To determine some of the possible consequences of raising the minimum point-hour ratios.

Procedures.—The academic records of all freshmen who entered the university in the autumn quarter of 1952 were examined to determine (1) the number of students who would have been dismissed had the proposed PHR rules been in effect, and (2) the quarter in which their dismissals would have occurred.

Major Findings.—The proposed rules would have resulted in 1,021 dismissals from the 3,221 freshmen studied. Under the existing PHR rules, 205, or about 20 percent, of these potential dismissals actually attained the ninth quarter, which was normal progress for these students. It was inferred that perhaps half of these 205 potential dismissals could conceivably raise their averages to the level required by the new rules by the end of their 12th quarter.

GARDNER, FRANK EDWARD. A Study to Determine the Relationship Between High School Preparation, The College Entrance Examination Board Scholastic

Aptitude Tests, and The First Semester College Grades. (Master's, 1958, Whittier College, Whittier, Calif.)

Director of study.—Homer Hurst.

Problem.—To find the correlations between (1) the grades attained by students in their first semester of college and the scores they obtained in the SAT tests; (2) the grades attained by the students in their first semester in college and the grades they attained in the four years of high school; and (3) to find a weighted equation giving relative weights to high school grades and SAT test scores.

Procedures.—Records of 537 students were examined, the data consisting of high school transcripts, college transcripts, and scores attained on the SAT tests. Correlations were computed, and an equation was developed combining the high school grades and the SAT verbal scores.

Major Findings.—The coefficients of correlation computed were all within the standard range of normally accepted limits for educational studies. All correlations could not be for predictive purposes because there was always some element in evidence causing the correlations to be different from zero; it was possible, however, to develop a predictive equation which could be used with confidence in the particular set of circumstances as presented in this study. The investigator cautioned against the indiscriminate use of any predictive equation for purposes of placement and guidance of college students.

GILBERT, ARTHUR CHARLES FRANCIS. High School Curricular Patterns as Related to Academic Success at the University of Nebraska. (Ph. D., 1965, University of Nebraska, Lincoln.)

Director of study.—Charles O. Neidt.

Problem.—To determine the influence of different patterns of high school preparation on achievement in general, on achievement within specific colleges, and achievement within certain specific majors at the University of Nebraska.

Procedures.—Students ($N=1,138$) were classified into different high school pattern groups on the basis of number of units of English, foreign language, social science, and mathematics completed.

Major Findings.—High school academic experiences seem to influence only the general achievement of subjects who earn more than two years of college credit. Those students earning less college credit or within specific colleges and within specific majors do not seem to be influenced by their high school curricular patterns.

GRAHAM, PATRICIA ALBJERG. An Analysis of the Backgrounds of the Students Graduating "With Highest Distinction"

From Purdue University in 1956. (Master's, 1958, Purdue University, Lafayette, Ind.)

Director of study.—Elizabeth K. Wilson.

Problem.—To explore and to analyze the backgrounds of 1956 graduates of Purdue University with highest distinction, and to isolate, if possible, significant factors which contribute to or are characteristic of academic success.

Procedures.—Pertinent data investigated by means of percentages.

Major Findings.—(1) Ten percent more women than men, proportionally, graduated with highest distinction. (2) Only 40 percent of this group who took the ACE Psychological Examination upon entrance to Purdue ranked above the 90th percentile. (3) Sixty-three percent of the parents of the students were employed in professional positions. (4) Eighty-three percent of this honor group whose high school ranks were obtainable ranked above the 90th percentile scholastically in their high school graduating classes. (5) Forty-two percent were employed during the summer and the school year in order to finance their educations. (6) Thirty percent engaged extensively in extracurricular activities during their undergraduate years at Purdue, while 15 percent did not participate at all. (7) Forty-two percent had transferred to Purdue from other institutions of higher learning during their undergraduate years.

GUILLAUME, GORDON ROBERT. A Study to Determine the Relationship Between High School Preparation and Achievement in the Basic Communications Course. (Master's, 1957, Whittier College, Whittier, Calif.)

Director of study.—Homer Hurst.

Problem.—To determine the relationship between high school preparation and achievement in the Basic Communications course at Whittier College.

Procedures.—The sample included names of all students who had completed the basic communications course at Whittier College from 1938 to 1953 inclusively, a total of 1,194 cases. Notations were made of each student's sex, basic communications grades, native ability as measured by the American Council on Education Psychological Examination, and high school preparation in six selected areas in terms of recommended or of nonrecommended grades. Data were compared statistically.

Major Findings.—English and language majors earned significantly higher grades in basic communications than those majoring in any other fields. Other majors received their marks in the following order of significance: Mathematics, natural science, social science, and life science. However, examination of the last few years indicated a possible trend

in the direction of higher coefficients for natural science, language, and mathematics majors. The gains could have been due to changes in the basic communications course content, or to changes in the students' high school preparation.

HEGERLE, DONALD HUGH. A Followup Study of the Graduates of Physical Education From San Diego State College. (Master's, 1958, San Diego State College, Calif.)

Director of study.—William L. Terry.

Problem.—(1) To determine the present professional or occupational status of men who graduated from San Diego State College with a major in physical education from 1951 to 1956. (2) To suggest methods by which physical education undergraduates may better prepare themselves for their future. (3) To give information which will aid the undergraduate in gaining an insight into employment conditions he may encounter.

Procedures.—The questionnaire was sent to 82 graduates, 74.4 percent responding. Questions concerned present position, length of service, adequacy of preparation offered at the State College, suggestions as to how the college program might be made more realistic, and suggestions as to the need for and the means whereby physical education graduates could learn of actual employment conditions.

Major Findings.—Nearly all of the graduates are still teaching and most of their teaching hours are in physical education. A significant number of these men either hold, or are preparing for, a credential in the field of administration. These men tend to move away from nonphysical education assignments during their teaching careers.

HOFFMANN, ELAYNE B. A Followup of the 1955 and 1956 Graduates of Arcadia High School to Determine Whether Their Guidance and Curriculum Needs Were Met. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Phelon J. Malouf.

Problem.—A followup of the graduates of the classes of 1955 and 1956 from Arcadia high school, Arcadia, Calif., to determine student reactions to the curriculum and guidance services offered during their high school years; and to ascertain the reactions of the class of 1956 to a change of administrative personnel and policy during their last year in high school.

Procedures.—A one-page questionnaire of 10 questions concerning student reactions to their high school experiences was sent to 328 graduates of the class of 1955 and to 402 graduates of the class of 1956. From the class of 1955, 188 replies were received, a response of 42.1 percent; and from the class of

1956, 181 replies, a response of 42.1 percent. Responses to the questionnaires were tallied for each question and percentages were computed by class in order to determine if the responses for the two classes varied in any degree.

Major Findings.—(1) The majority of the students who attend Arcadia high school continue their formal education by entering an institution of higher learning. Over 74 percent of the 1955 graduates and over 80 percent of the 1956 graduates entered college. (2) The 1955 and 1956 graduates were generally satisfied with their high school training, although "Senior Problems" had given them some concern, and they felt they should have had better training in study methods. (3) English, mathematics, science, and business training appear to be of most value to graduates in their postgraduate experiences. (4) Graduates of the class of 1955 and 1956 expressed a need for grouping according to their interests, abilities, and future goals; and the boys of both classes expressed a need for a class in auto shop. (5) Extracurricular activities were of benefit to the majority of the 1955 and 1956 graduates, although one-fourth stated they did not participate in these activities. (6) The 1955 graduates were dissatisfied with the administrative policies and counseling services offered, while the 1956 graduates expressed satisfaction with the administrative and counseling activities which resulted from changes effected in the summer of 1955.

HOUSE, MARY M. An Analysis of Composite Entrance Scores and Four-Year Averages for 1954-56 Graduates of New Jersey State Teachers College at Montclair. (Master's, 1957, Montclair State Teachers College, Upper Montclair, N.J.)

Director of study.—Orpha M. L. Lutz.

Problem.—To determine the relationship between two variables of composite entrance scores and four-year final averages for certain graduates of Montclair State Teachers College, and to interpret the findings for possible use by the college administration in selection of students, prediction of academic success, and guidance.

Procedures.—Entrance scores and final 4-year averages for the 162 graduates of 1954, 152 of 1955, and 165 of 1956, were studied. The paired variables for these years were plotted on scatter diagrams. From these plottings various statistical calculations were made to determine (1) the Pearson product-moment correlation coefficient (r); (2) the ranges, the means, and the standard deviation for each set of the composite entrance scores for the 4-year final averages.

Major Findings.—A definite relationship existed between the two variables. The Pearson product-moment coefficients of correlation

showed there was a statistically significant relationship of a positive nature for each graduating class.

HOWELL, ALWILDA DE JONG. A Follow-up Study of Fifty Selected Individuals Who Terminated Their Formal Education in the Special Education Department of the Waterloo, Iowa, Public Schools. (Master's, 1958, Iowa State Teachers College, Cedar Falls.)

Director of study.—George Ball.

Problem.—To determine the status of a selected sample of former special education pupils after a period of from 7 to 17 years following the termination of their formal education in the Waterloo, Iowa, public schools. The inquiry sought information in the areas of personal, social, and economic adjustment.

Procedures.—The study population was a group of 50 white boys who had terminated their education in the special education department between the years 1940-50. The selection was random in that the first 50 to be located and successfully interviewed were designated as the study group. Data for this study were obtained from the following sources: (1) recorded information in the subjects' cumulative school records, (2) personal interviews with the 50 subjects selected for the study, (3) personal interviews with the employers of those subjects having employment, and (4) the records of local law enforcement and public social agencies. All data were tabulated and percentages computed to facilitate the evaluation and analysis of the findings.

Major Findings.—Considering native capacities, the objectives of education had been substantially realized in this particular group. The majority of subjects were found to be functioning as adults in an acceptable and satisfactory manner in their various roles as heads of families, as employees and as members of the community.

JENNINGS, DOLF. Followup of Montana High School Seniors. (1958, State Department of Public Instruction, State Capitol Building, Helena, Mont.)

Director of study.—

Problem.—Followup information concerning high school seniors.

Procedures.—A 1-year survey (1957) instituted by means of questionnaire to high school counselors, 100 percent responding. Data were also obtained from nursing schools, business colleges, and colleges which graduates entered. Tables were constructed to show occupational and training areas for the graduates as of spring 1958.

Major Findings.—Of the high school graduates, 87.8 percent went to college; 17.9 per-

cent of the girls married by April 1, 1958. Dropout for the class, freshmen through senior year, was 25.2 percent. (The percent of high school graduates entering college has been fairly consistent over the previous 6 years, 38-40 percent for boys and somewhat lower for girls.) Of the boys, 77.4 percent, and of the girls, 70.7 percent, enrolled in Montana colleges or the State university. Approximately 70 percent of the total college enrollment was in State or publicly supported colleges. The number of high school graduates enrolling in college by high school grade rank were: 65.7 percent from the first quarter of their class; 48.9 percent from the second; 25.4 percent from the third; and 11.1 percent from the fourth. Approximately 21 percent dropped out during the first two quarters (or first semester). Montana colleges showed an overall 26.8 percent loss, the greatest being among students from high schools of 1-99 enrollment. At least 60 percent of the fourth-quarter high school students did not finish their first two quarters (or first semester) of college.

KEAN, WILLIAM F. A Followup Study of Certain Graduates of High Schools in the Niagara Frontier Area Class of 1953 Who Enrolled in Canisius College. (Ed. D., 1957, University of Buffalo, N.Y.)

Problem.—To discover factors related to success in Canisius College: socioeconomic background, educational background, measured abilities, and certain personal factors.

Procedures.—One-hundred percent sample of the selected high school graduates, recorded data, personal interview, statistical analysis.

Major Findings.—(1) The mortality rates in Canisius College were 29 percent freshman year, 8 percent sophomore year. (2) Ninety-nine percent of the selected graduates were residents of Erie County. (3) One or both parents of more than half had less than a complete high school education. (4) The majority fathers had either professional and managerial jobs, or skilled occupations. (5) Fathers in the professional and managerial classification exceeded significantly their population counterparts. (6) Fathers in semiskilled classification were exceeded significantly by their population counterparts. (7) The correlation between high school average and grade-point average was .759. (8) By May of their senior year in high school most of the students had made up their minds about continuing at Canisius College in the curriculum for which they were enrolled. (9) The principal reasons given for the selection of Canisius were economy, ability to live at home, and desire for a Catholic education. (10) Reasons given for choice of curriculum were liking for the subject and relationship to vocational objective. (11) The correlation between grade-point average freshman year and (a) ACE total was .895, (b) reading .855, and (c) IQ

high school .340. (12) About four-fifths had work experience during high school—90 percent in the summer of 1954 and more than half in the school year 1954-55. (13) The correlation between number of hours worked during school year 1954-55 and grade-point average during that year was .043 (statistically insignificant).

KRAMER GEORGE A. High School Class Rank and Academic Performance of Freshmen in College. (Ed. D., 1958, Rutgers, The State University, New Brunswick, N.J.)

Director of study.—William H. Atkins.

Problem.—To analyze the effectiveness of reported rank in class as a criterion in the admission of graduates of New Jersey public secondary schools to Rutgers, The State University. Also to analyze the assumption that better predictive patterns are possible when rank in class is considered individually by school, and to consider such factors as size of graduating class, per pupil expenditure, type of community, and the judgment of educators.

Procedures.—Certain statistical tests as suggested by Walker and Lev in the Area of Prediction.

Major Findings. Reported rank in class as a criterion for admission to college should be considered individually by school. A better academic record in college seems to be made by graduates of secondary schools which (a) have a large graduating class, (b) have a high per pupil expenditure rate, and (c) serve a residential or high income community. To improve the admissions procedures at colleges for men, single regression lines showing the effect of reported class rank on academic performance in college could profitably be drawn for each secondary school included in this study. Implementation of the results of the present study is recommended not only to Rutgers, but to similar institutions as well.

LOVE, P. A. A Followup Study of the Expectations of a Group of University Women. (Master's, 1957, The Ohio State University, Columbus.)

Director of study.—H. B. Pepinsky.

Problem.—To determine whether a relationship existed between persistence in college and academic achievement on the one hand, and expectations on the other.

Procedures.—Analysis included: (1) the correlation of individual freshman and senior sorts of 22 subjects; (2) intercorrelations of the sorts of student personnel workers yielding a maturity sort prototype; (3) correlation of 22 freshman and senior sorts with maturity sort prototype; (4) comparison of freshman item choices of 36 subjects who graduated and 32 subjects who did not graduate; and (5) correlation of freshman item

choices of nine selected items with cumulative point-hour ratios.

Major Findings.—(1) As freshmen and as seniors, this group of women students held similar expectations of college. (2) A few differences between freshmen and senior expectations were observed and noted. (3) Differences were found between the expectations indicated by seniors and by older, more highly educated student personnel workers. The expectations of a few subjects became more like the expectations of student personnel workers during 4 years in college, but the majority of the subjects showed no development in this direction. (4) As freshmen, subjects who eventually graduated rated expectations describing academic, philological, and cultural experiences as the more anticipated. Those who dropped out of college were inclined to expect college to develop independence, maturity, and social skills. (5) Freshmen expectations appear to be only slightly related to academic achievement. (6) The students were and continue to be highly conforming and "other-directed" in their expectations of what college would do for them.

LOWMAN, DOROTHY C. A Study of the Effectiveness of Health Appraisal and Followup Procedures in a Selected Public School. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—F. B. Jex.

Problem.—To investigate the effectiveness of health appraisal and followup methods in a selected public school of Salt Lake City and to compare the findings with experiences reported by other cities.

Procedures.—In addition to the school's cumulative records, records and reports from the City Board of Education and the City Board of Health were reviewed, and two methods devised for testing their accuracy and completeness. One was to secure the names of children known to be wearing glasses and to examine their records for test results and treatment. The other was to compare the percentage of children immunized against certain diseases, according to their health records, with a similar report on the same children prepared by the nurse from answers to questionnaires sent to the homes of these children.

Major Findings.—(1) Teachers seemed to be interested and concerned about their pupils but it would have been difficult for them to gain understanding of the health status of individual children from the records. (2) The cumulative records failed to give a complete picture of health appraisal and followup services in the selected school. (3) Children received a substantial number of screening tests, followup services, and corrections that were not recorded. (4) Teacher and nurse observations are rarely recorded. (5) Information about the health status of individual

children should be found in several different places—the school, the health department, and the Board of Education offices. (6) It would have been difficult for a nurse to select cases for followup with any degree of accuracy through reviewing health records. (7) One obstacle to effective followup was the lack of clear understanding by teachers or nurses as to what should be recorded, where it should be recorded, and by whom.

LUNDY, R. L. An Investigation of Some Generalized Differences Between Students Entering the College of Engineering and Graduating With High Grades, and Students Entering the College of Engineering and Not Graduating With High Grades. (Master's, 1959, The Ohio State University, Columbus.)

Director of study.—F. M. Fletcher.

Problem.—To investigate generalized differences between students entering the College of Engineering and graduating with high grades, and students entering the College but not graduating with high grades.

Procedures.—(1) The UCTC Educational-Vocational Planning Forms, filled out during the precollege conferences of 1952, supplied background data for each student in the study: his work experience, temperament, vocational interests and motivations, and measures of academic ability. Followup information included the student's cumulative point-hour ratio, and all official action taken on the student (from the time he entered through the fall quarter, 1957), such as dismissal, graduation, and transfer to other colleges within the OSU. (2) The students were assigned to one of five groups on the basis of the followup information: (a) high point-hour ratio, (b) medium point-hour ratio, (c) low point-hour ratio, (d) those who withdrew because of excessively low grades, and (e) those who graduated from a college other than that of the original registration. Those who did not fit into one of these categories were not studied, but were compared as to background variables.

Major Findings.—Available upon request.

MCCARDLE, PHYLLIS MARIE. A Comparative Study of Twenty-Seven "Intellectually Gifted" Men of the 1946 Class of the Salt Lake City Schools, With Twenty-Seven "Average" Men of That Class. (Master's, 1956, University of Utah, Salt Lake City.)

Director of study.—Phelon J. Malouf.

Problem.—A comparative study of selected groups of "gifted" and "average" high school students who graduated from three Salt Lake City schools in 1946.

Procedures.—Two groups, 27 (upper 3.5 percent of 2,000 graduates) "gifted" students and

27 "average" students, were identified and studied to determine what differences existed, 10 years after high school graduation, between the two in the following areas: (1) socio-economic and domestic status, (2) educational and military experience, (3) religious attitudes and activities, (4) community participation, (5) use of leisure time, (6) attitudes and opinions regarding secondary school program. Data were collected from available records and personal interviews.

Major Findings.—(1) In the area of parents' occupational status, the "gifted" students seemed to be favored over the "average" students. (2) The groups were comparable in marital status and size of the families of the parents at the time these students graduated from high school. (3) The "gifted" were significantly younger than the "average" at the time of high school graduation, exceeded the "average" in the area of academic achievements, had a much higher proportion of members in professional and semiprofessional positions, and had families as large as, or larger than, the average. (4) Leisure time interests of the "gifted" were broader, generally, than those of the average. (5) The total contribution of the group to the community was greater for the "gifted" than for the "average"; the "average" were more active in their churches than were the "gifted." (6) The "gifted" spent only two-thirds as many years in the armed services as the "average" and developed serious interests in occupational possibilities earlier than did the "average." (7) The "gifted" tended to feel a lack of sufficient stimulation academically in high school and made more comments on the problem of meeting individual learning needs in the classroom.

MCCANTHY, DARROW DEAN. A Study of the College Preparation and Success of 110 Uintah High School Students. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Phelon J. Malouf.

Problem.—To secure a fuller understanding of the academic program and preparation of high school students, particularly as reflected in college academic achievement.

Procedures.—Each university considered had submitted quarterly reports to Uintah high school of the grades achieved by former Uintah students when enrolled in the respective universities. These reports, which yielded the student sample investigated, were examined to determine the students' first-quarter college grade-point averages. The high school permanent record cards were inspected for information about the students' high school classes and grades. Cumulative records and permanent record cards were investigated to determine each student's intellectual ability level as described by 7th- and 10th-grade objective tests. The social status was deter-

mined by selecting longstanding community members to evaluate the social standing of the student's family within the community. Standard statistical techniques were employed in treating the data.

Major Findings.—(1) A significant relationship (.604) was found between high school academic achievement and college success. (2) There were academic differences (range from .430 to .790) from university to university in Utah. (3) The relation of high school grades to college grades was better for students who had followed the high school college-preparatory course of study than for those who had followed the vocational program. (4) More high than low IQ students had taken the high school college-preparatory program. (5) More high and fewer low IQ students had taken the high school college-preparatory program than other combined programs. (6) Fewer high and more low IQ students had taken high school vocational and general programs than college-preparatory and commercial programs. (7) College grades were more dispersed for high social status students than for low social status students.

McGINN, HOWARD F. Analysis of Pupils Who Withdraw and Transfer from a Catholic High School. (Ed. D., 1957. University of Pittsburgh, Pa.)

Director of study.—P. W. Hutson.

Problem.—To discover the reasons why pupils withdraw or transfer from a representative Catholic high school.

Procedures.—In 1955 and 1956 the author conducted a special followup study of the 894 boys who had entered the North Catholic High School of Pittsburgh, in September, 1948, 1949, and 1950, and would normally have graduated in 1952, 1953, and 1954. He found that approximately 70.5 percent had graduated, 2.5 percent had dropped out because their families had moved from the district, and 27 percent had withdrawn or transferred. By a study of the school's records of this 27 percent and by interviews with boys and their parents, the reasons for withdrawal and transfer were ascertained.

Major Findings.—Pupils for this school are selected on the basis of tests of ability and achievement in Catholic elementary schools, so that there is reasonable expectation that all can do the work of the academic curriculum. Analysis of the school records showed that the intellectual and educational level of the pupils who withdrew or transferred (to public high schools) compared favorably with that of their classmates who completed the 4 years at North Catholic. The interviews with the transferring students (82 percent) showed 16 percent to have transferred because of socioeconomic reasons, 49 percent because of failures during the year and in summer makeup sessions, and 35 percent because of various dissatisfactions with the school. Of the with-

drawing students (18 percent), a majority indicated a preference for work. Recommendations included improvement of the guidance program and greater flexibility in curriculum and schedule.

MECHAM, MILTON C. Business and Economics Followup Study. (1957. Weber College, Ogden, Utah.)

Directors of study.—Robert A. Clarke and Milton C. Mecham.

Problem.—To determine whether the students majoring in the Business and Economics Division were receiving adequate training to enable them to find employment in their chosen field; and whether graduation from the Business and Economics Division fulfills all lower division academic requirements at the senior institutions.

Procedures.—A questionnaire was sent to all students majoring in the Business and Economics Division during the years of 1948 through 1957.

Major Findings.—The majority of students reported the training they received was adequate to enable them to find employment in their chosen field. Students graduating from Weber College in the Business and Economics Division and transferring to a senior institution reported that: (1) Academic requirements available at Weber College were sufficient to satisfy lower division requirements at all senior institutions. (2) If they were starting school again, they would still prefer taking their first 2 years at a junior college. (3) The quality of instruction in the business subjects at Weber College measured up to the instruction received at other colleges.

MECHAM, MILTON C. Educational and Occupational Followup Study. (1957. Weber College, Ogden, Utah.)

Directors of study.—Milton C. Mecham and Robert A. Clarke.

Problem.—To determine, through an educational and occupational adjustment questionnaire, the success or failure of Weber College Technical Education students in their chosen field of employment; and how Weber College might better serve the needs of present and future students wishing to major in technical education.

Procedures.—An educational and occupational adjustment questionnaire was mailed to all technical education students who had attended Weber College 1952-57.

Major Findings.—(1) Fifty-six percent of the students reported that their training at Weber College had provided sufficient knowledge and skill to enable them to find employment in their chosen field, and 28 percent indicated to the contrary. (2) Classes outside their major field that aided the students in their chosen employment were: mathematics, listed by 48 percent; English, by 18.3 percent; typing, by

6.5 percent; chemistry, by 6.5 percent; sociology, by 2.1 percent; and life science, by 2.1 percent. (3) Sixty-nine percent reported that they had been adequately trained for their present positions, and 17 percent that they had not been, indicating areas they felt could be improved. (4) Students reported 44 different types of jobs held since leaving Weber College. (5) From the areas of instruction listed that might have been improved, the Technical Education Division gained considerable information for developing new courses of study. (6) The annual salary range for students reporting was from \$3,000 to \$6,000 plus.

MILLER, L. H., F. R. PETERS, and D. O. HERMAN. Followup Study of an Experimental Mathematics Test. (1958, The Ohio State University, Columbus.)

Directors of study.—L. H. Miller and F. R. Peters.

Problem.—To investigate the usefulness of a mathematics reasoning test in predicting mathematics grades, with special reference to more advanced courses than Mathematics 416 and 421 at The Ohio State University.

Procedures.—The following information was added to IBM cards available for all students in freshman mathematics during fall quarter 1957: Scores on the Ohio State Psychological Examination, The Ohio State University English Placement Test, form F of The Ohio State University Mathematics Placement Test, and an experimental mathematics reasoning test which was administered during the fall quarter, 1957. For the present study, the mathematics courses taken by each student in the winter and spring quarters of 1957, and the grades received in these courses, were also punched on the IBM cards, which were separated into different groups, based on the students' progress through mathematics courses. Within each group the relationships between course grades and scores on the experimental mathematics test and on the English Placement Examination were investigated.

Major Findings.—(1) The two tests did not yield significantly different correlations with course grades. (2) Students who scored high on mathematics reasoning and low on English were compared with those scoring high on English but low on mathematics reasoning. The mean grades in Mathematics 416 were equal for the two groups. More of the high mathematics-low English group, however, continued on to Mathematics 417 the following quarter, while more students in the high English-low mathematics group did not continue their study of mathematics.

MILLER, ROBERT JOHN. How Do You Now Feel About Your High School? A Followup Study of Graduates of Mari-

mont High School. (Master's, 1957, University of Cincinnati, Ohio.)

Director of study.—Worth R. Jones.

Problem.—To secure opinions of graduates of Mariemont high school, Mariemont, Ohio, concerning various phases of their high school program.

Procedures.—The normative-survey method was used. Data were secured through school records, telephone calls, and questionnaires. A total of 405 questionnaires were sent to students who graduated from Mariemont high school from 1951 to 1956, inclusive. Sixty percent of the questionnaires were returned.

Major Findings.—(1) Eighty-four percent of the graduates were satisfied with their high school training. (2) About 50 percent felt that the discipline was either not strict enough or not consistent enough. (3) Seventy-six percent rated their teachers as "satisfactory" in regards to using effective methods of teaching. (4) They checked most frequently "How to study" and "Better reading ability" and "More effective use of language" as items that should receive more attention in high schools. (5) Approximately one-fourth of the graduates thought that they did not participate in as many school activities as they would have liked.

MCDON, JOHN E. A Followup Study of Inservice Graduates of Farmington (Maine) State Teachers College. (Ed. D., 1958, Cornell University, Ithaca, N.Y.)

Director of study.—A. Gordon Nelson.

Problem.—To discover the attitudes of Farmington State Teachers College graduates toward the preparation they received as undergraduates for the teaching profession.

Procedures.—Questionnaire followup of graduates of the classes of 1932, 1933, 1954, 1955, and 1956.

Major Findings.—(1) The "Child and Curriculum" course was either criticized severely or approved enthusiastically. (2) Practice teaching was rated very valuable. (3) More work in guidance was needed. (4) The integration of professional and general education courses was considered desirable. (5) Laboratory experience at more than one grade level of the elementary school was desirable. (6) Discipline was regarded as the most serious problem of the beginning teacher. (7) Beginning teachers find the "real" classroom task disillusioning when compared with their "ideal" training experiences.

MUNSON, MILDRED M. A Study of Transfer Students Admitted to Sacramento State College With Probationary Status From September 1954 Through

September 1956. (Master's, 1958, Sacramento State College, Calif.)

Director of study.—E. L. Klingelhofer.

Problem.—To determine whether any significant relationship exists between the achievement of students admitted to Sacramento State College with probationary status, and aspects of their previous collegiate records—their scholastic abilities and aptitudes, age of entrance, and veteran status.

Procedures.—Lists of students who entered on probation were obtained from the Office of Admissions and Records, and test scores from the College Personnel Office. The assembled data were analyzed by use of chi-square tests to verify the hypothesis that the relationship between scholastic achievement at Sacramento State College and previous collegiate records, as well as the relationship between scholastic achievement and test scores, do not differ significantly from zero.

Major Findings.—A statistically significant positive relationship was found between academic achievement and both linguistic scores and total scores on the ACE Psychological Examination. The highest positive relationship was found between academic progress and scores on Part C (Vocabulary and Reading) of the Cooperative English Test. The following factors also were significant in relation to college success: (1) scores on Part A (Mechanics of Expression) and Part B (Effectiveness of Expression) of the Cooperative English Test, (2) type of educational institution attended previously, and (3) number of semester units attempted before entrance.

No significant relationship was discovered between academic achievement and the following: (1) quantitative scores on the ACE Psychological Examination, (2) grade-point average in work attempted before entrance, (3) age at entrance and (4) veteran status. Of the 304 students who entered on probation from September 1954 through September 1956, 55.3 percent had made scholastic records high enough to achieve good standing by June 1957; 20.6 percent were on continued probation; and 23.4 percent had been disqualified due to low scholarship.

OKSOL, OSCAR A. A Study of the Individual High School Records of the Graduates of Watertown (S. Dak.) High School. (Ed. D., 1956, University of Wyoming, Laramie.)

Director of study.—Lyle L. Miller.

Problem.—To investigate selected facts pertaining to the 1933-55 graduates of the Watertown high school, including scholastic rank in class, age at graduation, intelligence quotient, participation in athletics, letters earned in athletics, days absent, course pursued, and source of entry.

Procedures.—The basic data were obtained from school records, which included the per-

manent record card and the athletic register, with reference to the individual inventory file folders to verify information not clearly indicated on the permanent record card. Data were initially gathered on specially printed data cards and were coded for the information and guidance of the IBM personnel.

Major Findings.—No major findings. General recommendations were given to the school.

PAALE, EUGENE LEOPOLD. A Followup Study of the Graduates of Deer Park High School for the Years 1953, 1954, and 1955. (Master's, 1957, University of Cincinnati, Ohio.)

Director of study.—Worth R. Jones.

Problem.—A followup of the graduates of Deer Park High School, Deer Park, Ohio, for the years 1953, 1954, and 1955, to determine how effective their high school education had been in fitting them for postgraduate living, and whether or not they could offer, from their experience, any constructive suggestions for the betterment of the school.

Procedures.—Questionnaires were sent to 225 graduates, and 67.1 percent were returned, with 12.1 percent more girls replying than boys. A study of related literature provided an excellent background for comparing, interpreting, and judging the questionnaire results.

Major Findings.—The analysis revealed needs for: (1) A better college preparatory course; (2) more foreign languages, preferably French and German; (3) a family relations course for boys; (4) courses in commercial art, architectural drawing, elementary calculus, logic, etiquette, philosophy, and sociology; (5) an automotive mechanics course; and (6) more guidance. Other data disclosed that more than half of the boys surveyed were engaged in occupations other than professional, clerical, or laborer, including highly technical and specialized fields, such as engineering and electronics. The majority of girls were employed in some type of clerical work.

PEARSON, DAVID T., SR. Followup of Automobile Mechanic Students. (1956, Salt Lake Area Vocational School, Salt Lake City, Utah.)

Problem.—Two main purposes: (1) To find out how many students were entering the trade in which they had received training and what kinds of jobs they held. (2) To obtain former students' feelings concerning the value of training received and their suggestions as to how the training could be improved.

Procedures.—The responses were collected through personal interviews during which questionnaires were filled out by all students who had received 6 months or more of training during the 8 years prior to the study. Twenty-eight contacts were completed and the information was compiled in frequency tables.

in categories of positive, negative and constructive.

Major Findings.—At the time they were contacted, 28.6 percent of the former students were working as automobile mechanics, 53.6 percent at other jobs, and 17.8 percent were unemployed. One of the unemployed was a church missionary and another was a retired veteran. There were numerous constructive comments, and several changes in the program implemented as a result of the ideas gathered.

PEARSON, DAVID T., SR. Followup of Electricity Students. (1957, Salt Lake Area Vocational School, Salt Lake City, Utah.)

Problem.—(1) To find out how many students were entering the trade in which they had received training and what kinds of jobs they held. (2) To obtain former students' feelings concerning the value of training received and their suggestions as to how the training can be improved.

Procedures.—The responses were recorded on a questionnaire which was filled out during a personal interview, except for one questionnaire which was handled through the mail. Included in the study were the 34 students who had completed 6 months or more of training during the prior 3 years. Twenty-three contacts were completed and the information compiled in frequency tables.

Major Findings.—At the time of the study 47.8 percent of the former students were employed in the electrical trades, 43.5 percent at other jobs, and 8.7 percent were unemployed. One of the unemployed was a church missionary and another had been successfully employed as an electrician and was temporarily unemployed. The constructive comments of these former students have resulted in closer scrutiny of the school's training program and some changes have been carried out.

RECKIN, GERALD EUGENE. A Followup Study of San Diego State College Graduates of Industrial Arts 1951 through 1956. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Kenneth Phillips.

Problem.—To report to the faculty of the department of industrial arts on the general satisfaction of its graduates, not only with teaching, but also with the curriculum for teacher education in industrial arts, 1951–56.

Procedures.—A review of the literature available on followup studies of a similar nature, preparation of a questionnaire, and organization of interviews. Seventy-five percent of the graduates returned the completed questionnaire.

Major Findings.—Eighty-one percent of the graduates reporting still held their original

teaching positions. More of them were teaching general metalworking than any of the other industrial arts courses they had taken at San Diego State College. Seventy-five percent majored in industrial arts; 78 percent were continuing a graduate program of education, 20 of the 24 in the group were working toward the master's degree, and all were working for advanced credentials.

STAMBACH, HAROLD M. Relationship Existing Between Scores on the New Mexico Statewide Testing Program and Marks Attained During the Freshman Year at New Mexico Western College. (Certificate of Advanced Graduate Study—6th year, 1957, New Mexico Western College, Silver City.)

Director of study.—Gladys Bookman.

Problem.—To discover whether a relationship exists between scores achieved on New Mexico statewide tests of academic aptitudes and marks attained by the same students during their freshman year at New Mexico Western College.

Procedures.—Records covering 8 years were obtained from the principal's office of Cobre high school and the registrar's office of New Mexico Western College, including the last test taken by the students in fall 1954. No attempt was made to distinguish between superiority or degree of difficulty that might exist between various subjects. However, only those students were considered who had completed their freshman load.

Major Findings.—(1) In general, grades received in college corresponded to placement in quartiles on the basis of the New Mexico Statewide Test of Academic Aptitude. (2) The greatest percentage receiving their bachelor's degree was in the upper 25-percent group and the smallest in the lower group. (3) The greatest percentage receiving their master's degree was in the middle 55 percent group, the smallest being tied by four groups. However, no one received a master's degree in the lower 25-percent group. (4) Nearly twice as great a percentage dropped out in the lower 50-percent group as in the upper 50-percent group.

SWANK, DONALD. An Analysis of Scholastic Achievement of Transfer Students From Purdue Extension Center. (Ph. D., Purdue University, Lafayette, Ind.)

Director of study.—Elizabeth K. Wilson.

Problem.—To determine whether extension students who transfer to Purdue campus differ from matched campus students in: (1) scholastic achievement, (2) proportional number graduated, (3) proportional number on probation, (4) proportional number of semesters completed, and (5) proportional number graduated with honors.

Procedures.—The 251 extension students selected for this study consisted of two groups: all 170 extension students who had transferred to Purdue campus with a classification of first-semester sophomores in 1951, 1952, 1953, and 1954; and all extension students who had transferred to Purdue campus as first-semester juniors in 1952, 1953, 1954, and 1955. These two groups were matched with campus students on four variables—sex, semester classification, cumulative index over comparable periods, and the school in which they registered at the university. Techniques used to analyze the data were: Bartlett's Test for homogeneity of variance, single classification of variance, *t* test of overall means, and the chi-square test of correlated proportions.

Major Findings.—The students who had transferred from extension did not differ from campus students in either proportional number of semesters completed or proportional number of graduates with honors. The students who had spent 2 years in extension did not differ from matched campus students in any other of the aspects under consideration. The students who had spent only one year in extension had a slightly larger percentage placed on probation and a smaller percentage graduating than did their matched campus sample.

ULLOCK, EMMA M. Case Studies of Teen-Age Students Who Left School to Marry. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—F. B. Jex.

Problem.—To explore, through personal interviews, the situations of certain teenage students after 9 to 10 years of marriage. One or both of the parties of each marriage had left school in 1947 to marry.

Procedures.—The names of 22 individuals interviewed for this study were gleaned from the 1947 records of vital statistics at the Salt Lake County Court House. The basic data were recorded on an interview schedule which was used as a guide during the interview. All interviews were held during 1955 and 1956. Additional data were secured from school records.

Major Findings.—From 22 case studies of teenagers who left school to marry: (1) Most of the marriages seemed unwise. (2) In the few "successful" marriages, the stability and maturity of the marriage partners were important contributing factors. (3) Social institutions such as the home, school, and church did not appear to meet the needs of the teenagers.

WEISER, EARL. Survey of Occupational Interests of High School Seniors. (1957.)

Director of study.—L. O. Brockman.

Problem.—To survey the occupational interests of high school seniors, to establish con-

tacts with students wanting vocational and technical training of the type offered by Northern Montana College, and to develop those areas of training in which the seniors express interest.

Procedures.—A questionnaire to high schools over the State. Approximately 85 percent return.

Major Findings.—In general, the high school seniors showed unrealistic occupational choice and expectations: e.g., 66 percent planned to enter professional or semiprofessional areas. These results are in harmony with the usual findings in similar studies.

WILSON, D. PARRY. A Followup Study of Utah High School Graduates and Dropouts With Implications for Guidance in the Secondary School. (Ed. D., 1956, Utah State University, Logan.)

Director of study.—John C. Carlisle.

Problem.—(1) To report and analyze the findings of the Utah followup questionnaire as they permit an evaluation of the total educational program of the secondary schools of Utah, but particularly of the guidance services. (2) To suggest the implications for changes and improvements in the high school program, particularly in guidance. (3) To report data concerning former high school graduates and dropouts that would help present high school students to capitalize more fully upon the school's offerings.

Procedures.—During the 1953-54 school year, 66 high schools in cooperation with the State Department of Public Instruction conducted a statewide followup study of students who had entered the 9th grade in 1936, 1946, and 1948. Of the 73 questions in the questionnaire, 65 had definite implications for guidance in 4 divisions: vocational, educational, social, and personal adjustment as related to guidance.

Major Findings.—(1) The superior progress of high school graduates as compared with dropouts indicates the value of high school education. (2) A definite need exists for more adequate and more effective vocational, educational, social, and personal guidance services and for a rich variety of activities enabling pupils to explore and develop their interests and talents. (3) In terms of the requirements of contemporary society, the former high school students have made a satisfactory adjustment. (4) Followup can be a valuable technique for appraising the high school offering, for collecting information necessary to improve the secondary school program, and for establishing better communication between the high school and the community at large. Improvement is needed in three broad phases of the school program; the curriculum, the extracurriculum, and the guidance services.

YOUNG, JOHN F. A Comparison of the Academic Preparation and Achievement of College Students From Various Size High Schools in Indiana. (Ph. D., 1958, Purdue University, Lafayette, Ind.)

Director of study.—Clarence A. Pound.

Problem.—The two major hypotheses tested were: When scholastic aptitude is held constant there is no difference between graduates from various size schools in respect to (1) academic preparation, (2) college academic achievement.

Procedures.—The sample included 1,240 resident students who entered Purdue as freshmen in the fall of 1952. The subjects were classified according to four major university schools, namely, engineering; science, education, and humanities; agriculture; and home economics. The subjects within each school were then categorized into six groups, representing the following high school sizes: Group 1, 0-99 students; Group 2, 100-199 students; Group 3, 200-299 students; Group 4, 300-499 students; Group 5, 500-999 students; Group 6, 1,000 or more. To determine the students' preparation in mathematics, English, and physical science, the test percentiles of the orientation tests in these fields were obtained from the office of admissions. Chi-square test of significance was the method of analysis, a separate analysis being made for each of the university schools.

Major Findings.—In the School of Engineering, students from large high schools seemed significantly better prepared in mathematics and physical science than students from small high schools, the former having a higher first-semester index. The Agriculture students from large high schools were significantly better prepared in English than those from small high schools. No other significant relationship was found between high school size and any other factor in any of the university schools—in preparation, first semester index, last semester index, number of courses failed, or number of semesters completed.

Measurements

ACK, MARVIN. Teachers' Ratings vs. Psychologists' Ratings on Students' Adjustment. (Ph. D., 1958, Western Reserve University, Cleveland, Ohio.)

Director of study.—Marvin Powell.

Problem.—To try to learn more about teachers' ratings of the adjustment of children as compared to ratings made by clinical psychologists.

Procedures.—Children given 4 projective tests, and 10 psychologists rated the children on the

basis of these tests. The teachers rated them on actual behavior patterns. A comparison was made of the two sets of ratings.

Major Findings.—Teachers and psychologists showed some agreements in areas rated but were different on the more "covert" characteristics. Teachers need still more training in techniques of diagnosis.

ALPERN, MORTON. The Development and Validation of an Instrument Used to Ascertain a School Principal's Pattern of Behavior. (Ed. D., 1954, University of Florida, Gainesville.)

Director of study.—Kimball Wiles.

Problem.—Discovery of an instrument to measure behavior of school principals in vital professional situations, after prior determination of vital situations and possible courses of action in these situations.

Procedures.—Extensive study of behavior of four Florida principals and national sample of principals by 121 items in an open-ended questionnaire (90 samples). Validity tested by formulated Principal Behavior Check List, based on 121 item essay questionnaire, tested on 28 Florida principals for suggestions. Validation of intensive study of four principals by case study, and opinions of five selected teachers in each principal's school.

Major Findings.—Specific recommendations for use of devised Principal Behavior Check List. Areas for use suggested (1) county or city administrative and supervisory group meetings, etc., (2) supervision classes at institutions of higher learning. Proposed dimensions of behavior for further study in identifying patterns of behavior: directness-apathy; control-delegation; isolation-membership.

ALPERT, HARVEY. The Relationship of Empathy to Reading Comprehension in Selected Content Fields. (Ed. D., 1955, University of Florida, Gainesville.)

Director of study.—George D. Spache.

Problem.—To investigate the relationship of empathy and projection to reading comprehension in literary and nonliterary materials and to evaluate the implications of the findings in terms of teaching reading improvement.

Procedures.—Sample of 101 freshmen (71 females and 30 males) at University of Florida. Variables measured were empathy, projection, literary comprehension, nonliterary comprehension, intelligence and adjustment, with the two latter variables held constant. Separate computation was made by sex. Tests used: Bender-Hastorf Empathy Scale, Bell Adjustment Inventory, American Council on Education Psychological Examination, Diagnostic Reading Test, Survey Section Form D (nonliterary), compiled literary reading test

from various forms of cooperative reading tests, judged by specialists in test construction, reading and English.

Major Findings.—(1) Females have higher empathic ability than males. (2) Empathy is not related to reading ability in literary or nonliterary fields. High empathic ability in females is associated with low reading comprehension in literary materials. (3) Knowledge of empathy in a person is of little aid in predicting reading performances in literary or nonliterary materials. (4) There are no sex differences in degree of projection. (5) Degree of projection is not related to reading comprehension in males. Females who show a high degree of projection tend to have a higher level of comprehension in literary materials. (6) Lowered tendencies to projection tend to indicate a higher level of comprehension in nonliterary materials, especially for females. (7) Knowledge of the extent to which a female projects feelings, etc., is of considerable aid in prediction in nonliterary materials. (8) Lowered tendencies to projection indicate greater comprehension ability in nonliterary materials.

APPEL, V. H. Verbal Participation as a Measure of Self-Direction. (1958, The Ohio State University, Columbus.)

Directors of study.—H. L. Coon, A. W. Foshoj, and H. B. Pepinsky.

Problem.—To determine whether frequency of verbal participation can be used as a measure of "self-directive" behavior among kindergarten students at The Ohio State University School. The hypothesis tested was as follows: Students whom the kindergarten teacher designates as "self-directive" will participate verbally in class discussion more frequently than those whom the teacher designates as "nonself-directive."

Procedures.—The kindergarten teacher selected the five most, and the five least, "self-directive" students in her class. In a pilot study, observers recorded student and teacher responses during a classroom period. These verbalizations were categorized and the response types used to construct an observer's check-sheet for categorizing and tallying student verbalizations. Using the check-sheet, five observers each categorized and tallied the verbal participation of two students on four occasions over a 2-week period. Thus the frequency and type of verbalization were tallied for a total of five "self-directive" and five "nonself-directive" students. The chi-square test was used to determine the significance of the difference in participation frequency between the "self-directive" and "nonself-directive" groups.

Major Findings.—The amount of student-initiated verbal participation exhibited by the "self-directive" group was significantly greater than that of the "nonself-directive" group at the .001 probability level. The amount of

student-initiated verbal participation exhibited by any member of the "self-directive" group exceeded that of the most verbal member among the "nonself-directive" students. A greater percentage of remarks made by the "self-directive" group than those of the "nonself-directive" groups were student initiated. Student-initiated verbal participation may provide an operational definition of self-direction, though the results of this study must be applied cautiously beyond the particular setting in which observations were made.

ARSENIAN, SETH and HENRY PAAR. The School Counselor's Professional Self-Concept. (1958, Springfield College, Springfield, Mass.)

Director of study.—

Problem.—To gather empirical data on counselors' professional self-concept.

Procedures.—Seventy-one counselors and counselors-to-be were presented with a list of 70 statements, presumably relevant to the professional self-concept, and were instructed to rate the statements on a 3-point scale: (1) not defining the self-concept, (2) defining it, (3) most important in defining it. The resulting data were grossly analyzed by grouping and regrouping the subjects on the basis of sex, age, experience, etc., to learn what effects such variables have on the self-concept.

Major Findings.—(1) Each statement on the scale potentially defined the self-concept. (2) All 45 male subjects reached 100 percent agreement on 12 of the statements, and all 25 female subjects, on 13. (3) The 22 secondary school counselors agreed with the 38 subjects (who were either not yet or not directly involved in counseling) by giving a preponderant scale rating of "1" to eight of the statements. Further, the same two groups agreed by giving heavy scale ratings of "3" to five of the statements. (4) In terms of the statements, the following were most often mentioned as defining the school counselor's professional self-concept: He should have the ability to understand the personal and emotional difficulties of individuals; he should have patience, warmth, a knack for getting along with people; and a sense of humor.

The following were most often mentioned as *not* defining the self-concept: The counselor should be an extracurricular activities leader; he should feel he is getting adequate compensation, to avoid feelings of bitterness and enhance feelings of his own worth. In essence, statements of a positive attitudinal nature are likely to be included in the self-concept, while statements of a negative functional nature are likely to be excluded from the self-concept.

BARRETT, JOSEPH A. Item Analysis of a Forced Choice Rating Scale by Major Curricula at the University of Scranton.

(Master's, 1958, University of Scranton, Scranton, Pa.)

Director of study.—Paul Lilly.

Problem.—To provide high school principals and guidance counselors with an improved instrument to describe personal and character traits needed for success in college.

Procedures.—Analysis of statistical data. High school principals and guidance counselors rated high school seniors on a forced choice scale constructed by Lilly (sample sizes, 27 to 58). Those seniors who later matriculated at the University of Scranton were followed through and their quality point averages determined at the end of the first semester. By analysis, items contributing low to the outside criterion (quality point averages) were dropped, and the revised scale made up of the remaining items.

Major Findings.—Correlation between high school seniors' scores on the revised Lilly scale and first-semester college grade-point averages for groups of students in various courses of study were as follows: (1) Arts and social studies, .648, .665, and .708; science, .642 and .636; preengineering, .440 and .508; business, .453.

BARTON, IRVIN MARK. Development of a Kuder Preference Record Occupational Form D Scoring Key for Secondary School Counselors. (Master's, 1958, Iowa State College, Ames.)

Director of study.—G. Gordon Ellis.

Problem.—To develop a "Kuder Preference Record Occupational Form D" scoring key for secondary school counselors.

Procedures.—The Kuder Preference Record Occupational Form D was sent to 222 certified, approved, practicing secondary school counselors in Iowa. All school counselors in the study met the minimum standards for "teacher-counselors" as established by the Iowa State Department of Public Instruction. Returns from 200 school counselors were used in the final tabulations. The data were statistically treated according to procedures outlined in Kuder's Research Handbook (Kuder, G. F., Kuder Preference Record Occupational Form-D Research Handbook, Chicago, Science Research Associates, 1956, pp. 28-30).

Major Findings.—The interest patterns of certified, approved, practicing secondary school counselors in Iowa were significantly different than those in the general occupational norm group established by Kuder. A scoring key for school counselors was developed for the Kuder Preference Record Occupational Form D. This key should be useful in identifying individuals who have interest patterns similar to secondary school counselors.

BATTLE, JEAN A. Techniques and Instruments for Measuring Certain Student

Human Relations. (Ed. D., 1954, University of Florida, Gainesville.)

Director of study.—L. N. Henderson.

Problem.—To find techniques and instruments which in a minimum amount of time would accurately determine student human relationships within the school and which could be administered efficiently by the regular school staff.

Procedures.—Intensive study of student human relations for one academic year in four different type schools, resulting in development of techniques and instruments for measuring human relations. Validity and reliability were tested in a fifth school by correlations with teacher judgment, judgment of author and others investigating item analysis, and split-half test. The four schools were: (1) consolidated rural white, (2) consolidated rural colored, (3) university urban community, (4) beach community. Grades 6, 9, and 12 were used to develop and test the instruments.

Major Findings.—(1) The "Student Attitude Test" was found more adequate than two selected attitude tests. (2) Low correlations, not significant, were found between student attitude scale and Ohio Social Acceptance Scale. (3) The devised techniques showed similarity to class observational techniques. (4) The Student Attitude Scale and the Ohio Social Acceptance Scale are recommended for use when one class period only is available. In addition, a class interview is recommended if two or three class periods are available; and class observational techniques, if several days are available.

BELEN, ENNIO U. Development of a Reading Readiness Test for Puerto Rico. (Master's, 1957, The Pennsylvania State University, University Park.)

Director of study.—Edward Van Ormer.

Problem.—To develop an instrument that would help ascertain which Puerto Rican children at the beginning of the first grade are ready for reading instruction and which are not ready.

Procedures.—A Reading Readiness Test was constructed by modifying certain parts of the *Prueba Colectiva Puertorriquena de Capacidad Mental* and by preparing new parts. The test was administered to 297 pupils in 6 towns of Puerto Rico selected on the bases of first-grade enrollment, geographical distribution, and nature of economy, industrial or agricultural. Criteria for selecting pupils were (1) ages 6 or 7, (2) equal proportion of boys and girls, and (3) first year in school. Additional data were gathered by the Sims socioeconomic questionnaire, a general ability test, and a reading test. An item analysis was made of the parts of the Reading Readiness, using total scores as an internal criterion. A second item analysis was made against reading test

scores as an external criterion. Intercorrelation of all variables was computed.

Major Findings.—The Reading Readiness Test was found adequate to aid in distinguishing between those ready and those not ready for reading instruction. The following factors were most clearly related to reading progress: (1) word-pattern discrimination, (2) word-rhyming, (3) picture directions, (4) intelligence, and (5) socioeconomic status. The most valid part of Reading Readiness was word-pattern discrimination.

BENSON, GERALD P. An Evaluation of Teacher Ability to Identify Maladjusted Children. (Ed. D., 1956, University of Michigan, Ann Arbor.)

Director of study.—Dorothy M. Shuman.

Problem.—To test the ability of teachers to identify children needing help, to describe maladjustment operationally for teachers, and to compare the findings with the results reported in similar studies.

Procedures.—Thirteen 4th-grade teachers with class enrollment totaling 392 pupils listed 57 pupils (21 percent of the boys and 8.7 percent of the girls) as needing help, and observed them by using descriptions of maladjusted behavior. An additional 16 pupils were included, making a total of 73 who needed help. By these two procedures, teachers listed 18.6 percent of the sample as needing help: 44 boys (24 percent) and 29 girls (18 percent).

Each teacher also expressed judgment on the extent of help needed and developed a case folder for each of the 73 pupils. Two psychologists with advanced degrees in clinical psychology and recent experience in diagnostic work with children analyzed the material and made judgments on each child's need for help. The judgments of the teachers and of the clinicians were compared by the contingency coefficient and analysis.

Major Findings.—If a teacher judged a child to need psychological help, her judgment was, in the opinion of the clinician, valid. Only three pupils judged by the teachers as needing psychological help were judged by both clinicians as only slightly maladjusted and therefore capable of being helped sufficiently by the classroom teacher. Both clinicians believed more children needed psychological help and that three out of the same pupils needed more than teacher assistance.

The number of children characterized by withdrawal tendencies suggested that teachers recognize the possible seriousness of such behavior. The percentage of children (18.6) identified as needing help agrees closely with the findings of Andrew and Lockwood in the Michigan Mental Health Survey (19 percent). Both groups contained children who were slightly maladjusted. Teachers judged 10.8 percent of the pupils to be more severely maladjusted and in need of psychological help,

as compared with 7 percent reported by Wickham and 12 percent by Rogers.

BICA, VIOLET, KENNETH HAZEN, and COMMITTEE of Kent Area Guidance Council. A Proposed 12-Year Testing Program. (1958, Kent State University, Kent, Ohio.)

Director of study.—

Problem.—To define desirable characteristics and typical programs of testing in Ohio.

Procedures.—Questionnaire method was used to secure typical testing programs in Ohio cities and counties, with trained persons in charge.

Major Findings.—Frequency of certain tests is reported and an evaluation is given of certain desirable characteristics.

BODE, FRED R. and ERVEN BRUNDAGE. Academic Achievement of Mentally Retarded Students. (1958, San Diego County Schools, Calif.)

Problem.—To find the growth pattern on achievement tests for educable mentally retarded students (IQ 50-80) from 8 to 17 years of age in the San Diego County Schools.

Procedures.—Records available covered a 9-year period (1948-57) on 280 educable mentally retarded students. Wide Range Achievement and California Progressive Achievement tests had been administered each spring. Median scores for nine age groups representing each chronological year level from ages 8 to 17 were plotted in graph form.

Major Findings.—(1) There was continuous growth on achievement tests from 8 through 16 years of age. At no time did the children regress. (2) Greatest growth appeared during the 8- to 12-year period with 3.3 years growth in academic achievement. (3) Educable mentally retarded students can be taught new academic skills at least through age 16. High school programs should reflect this potential. (4) Academic growth for this group was only half as fast as for an average group of students.

BONEY, J. DON. A Study of the Performance of Negro Students on Intelligence, Aptitude, and Preference Measures. (Master's, 1957, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate the effectiveness with which the Differential Aptitude Tests and the Kuder Preference Record (Vocational) could be used with Negro high school students in Texas.

Procedures.—The investigation was carried out in the Negro high schools of two Texas communities. School A (a junior-senior high school) in a city of about 85,000 population,

of which 15 percent are Negroes) enrolls 600 students and graduates approximately 50 from the senior class each year. School B (in a city of 10,000, of which 15 percent are Negroes) is housed with other grades, and graduates approximately 20 from the 12th grade each year. The DAT and Kuder Preference Record (Vocational) were given to students in the 10th and 12th grades during 1956-57. California M.M.I.Q.'s and grade-point averages were also available. Statistics used include Pearson r , Fisher z , chi square, and t - and F -tests.

Major Findings.—(1) In School A, the expected sex differences were found in comparisons which involved 12th-grade students. Because of generally low mean scores, none of the conventional differences was significant at the 10th-grade level. (2) In School B, the stereotyped sex differences were again significant with 12th-grade, but not with 10th-grade students. (3) The California IQ's were highly correlated with grade-point averages. The r 's (by z transformation) averaged about .60. (4) California IQ's were generally quite highly correlated with DAT scores on the Verbal Reasoning (VR), Numerical Ability, Abstract Reasoning, spelling, and sentences tests. In general, highest r 's were found with the VR, spelling, and sentences tests. (5) Across seven comparisons, numerical ability, abstract reasoning, spelling, and sentence scores were highly correlated with grade-point averages. (6) The Kuder Preference scores varied sharply from the author's norm, especially with males. Many low V scores, upon followup, were the product of cultural bias rather than inaccurate interpretation of test content. (7) Many students had severe difficulty with the test. The author, a Negro counselor, recommends selective rather than general use of the DAT in settings such as those of Schools A and B.

BRAUER, NORMA MAE. The Expressed Interests of Selected Fifth-Grade Pupils in Out-of-School Activities. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Evans L. Anderson.

Problem.—(1) To discover the expressed interests of a selected group of 5th-grade children in certain out-of-school activities, which experiences children consider the most interesting, how much time is devoted to these experiences, and in some cases, differing interests of boys and girls; and (2) to provide the classroom teacher, for guidance purposes, with a better understanding of the children.

Procedures.—A questionnaire which children filled out at home with the aid of their parents. Other data were obtained from personnel cards, oral questioning, and three questionnaires concerning subject preference.

Major Findings.—Subject preference varied, with social studies rated as unpopular. The children reported an average of 40 minutes a

day in out-of-school reading: boys about science and girls about fairy stories. Seventy-six percent indicated that they read the newspaper daily: comics, headlines, and television programs. Half the children checked books from the library every two weeks. *Life* and the *Saturday Evening Post* were the favorite magazines. Eighty-nine percent studied at home, with arithmetic and spelling studied more than other subjects. One-third of the class practiced an instrument from 30 to 60 minutes daily and 68 percent belonged to out-of-school organizations. With these conclusions, the teacher's guidance program should be one of encouragement.

BRINTLINGER, GLADYS. A Study of Adjustment Measures. (Master's, 1958, Miami University, Oxford, Ohio.)

Director of study.—R. W. Edmiston.

Problem.—To determine what and how many measures should be used to evaluate adjustment.

Procedures.—Scores of adjustment of 81 high school seniors were obtained from two of the objective-type inventories, the average of three counselor's ratings, the average from four questions to obtain the evaluation of one's classmates, and one activity and experience record completed by the student. Multiple correlation. The average of the scores from the measures was used as a criterion.

Major Findings.—The correlations between the scores from the two objective-type inventories were Social Adj. $r = .74$, Self $r = .82$, Home $r = .93$ and Total $r = .76$. While one of these might be omitted, all other measures increased the multiple R with the criterion for total and social adjustments. The sociometric scores did not measure self-adjustment. Only the experience and activity records score on home adjustment added to the inventories score for this factor.

BUEL, W. D., F. R. PETERS, and M. WHITEMAN. The Relationship Among Personality Variables, Aptitude Measures, and Learning in an Experimental Course in Economics. (1958, The Ohio State University, Columbus.)

Directors of study.—M. Lovenstein, H. B. Pepinsky, and F. R. Peters.

Problems.—To investigate relationships among course achievement and selected values, and personality characteristics of the students in an experimental two-quarter Introduction to Economics course.

Procedures.—Subjects were 20 students still enrolled in the experimental course at the end of the fourth week of the second quarter. (1) Each student was given the Stern Activities Index and the Inventory of Beliefs. (2) From college records the following information was collected: point-hour ratios, placement tests, Ohio State Psychological

Examination Scores, and final grades for the course. (3) The variables above were inter-correlated, and a factor analysis was made in order to derive factor groupings to account for variance among the variables.

Major Findings.—The factor analysis yielded eight measurably distinct and meaningful psychological components, to describe the 20 students: general scholastic ability, English ability, ability in mathematics, timid skepticism, sterile equanimity, aggressive nonconformity, status-oriented conformity, and repressed self-control. The relationship between total point-hour ratio (PHR) and the first three factors (academic abilities) was relatively high, while the factor of "timid skepticism" was highly related to total PHR. This suggests that, in general, the university culture accepts and rewards a tendency to reject stereotypic generalizations and to ask for the facts of the case, but only if this tendency is restrained and controlled. Further emphasizing the avoidance of troublesome behavior, there is some tendency to reward what has been called "sterile equanimity."

BURKHARDT, FREDERIC SMITH. Teacher Selection of Superior Children. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Francis A. Ballantine.

Problem.—To test the hypothesis that the classroom teacher can select the children from his class who are potentially superior with sufficient reliability that the children may be grouped on the basis of his recommendations.

Procedures.—The teachers in three grades at the Casa de Oro School were asked to indicate those children in their classes whom they thought would test at 120 IQ or higher on a Stanford-Binet Individual Intelligence test and to estimate, within a range of five points, what they felt each child would score on such a test. The selected children, 5 boys and 16 girls, were then given the Stanford-Binet tests. Coefficients of Correlation were determined by the Spearman Rank-Difference Method and by the Pearson Product-Moment Method. Two pilot classes were set up from these selected children. The grouping was successful and provided enriched learning for all children in these classes.

Major Findings.—The IQ's of the selected children were found to range from 114 through 176. Since only two of them fell below the 120 score it was felt that the assumption of the hypothesis seemed acceptable. The boys seemed to be overrated and the girls underrated. Coefficients of Correlation between the true IQ's and the estimates were .567 by the Spearman Rank-Difference Method and .530 by the Pearson Product-Moment Method.

BUSCH, ALLEN C. The Relationship Between Factors of Personality and Fac-

tors of Intelligence. (Master's, 1958, Miami University, Oxford, Ohio.)

Director of study.—R. W. Edmiston.

Problem.—To determine whether any relationship exists between factors of personality (adjustment as measured by the objective inventory technique, by counselors' ratings, and by sociometric ratings) and intelligence disparity (as measured by achievement ratio, by the difference between verbal and numerical intelligence, and the difference between linguistic and motor capacities).

Procedures.—Study used 225 high school seniors. Method: Correlation.

Major Findings.—No significant correlations were obtained between any measures of personality and disparity except in the case of the achievement ratio. In the latter case both the counselors' ratings and sociometric scores gave an $r=.27$. Both CR and sociometric scores show relations to intelligence which may be the result of low ratings for known lack of scholastic success. The implications for guidance are that individual differences in capacity are not explained by differences in personality, as measured.

CALDWELL, EDWARD. A Study of the Stability of Scores on a Personality Inventory Administered During College Orientation Week. (Ed. D., 1958, Florida State University, Tallahassee, Fla.)

Director of study.—Russell P. Kropp.

Problem.—To determine whether Personality Inventory Scores were affected by administration during a stressful period, and the extent of the tests' effectiveness in screening out students who need special counseling.

Procedures.—Scores from California Test Personality were secured for a random sample of entering freshmen who took the test during fall orientation week. The test was readministered 6 weeks later. Scores were compared. Proportions migrating across a previously set cutting score were determined and interviewed to ascertain what factors influenced the changes in scores.

Major Findings.—Results from the inventory administered during orientation week differed significantly from results on the retest. Students screened out for counseling on the orientation test varied considerably from those on the retest. Interviews revealed that orientation administration was, to a large extent, responsible for the discrepancy in scores from test to retest.

CHAMBERS, FRANK MAY. The Relationship of Empathy to Scholastic Success With Implications for Student Personnel Workers. (Ed. D., 1954, University of Florida, Gainesville.)

Director of study.—Leon N. Henderson.

Problem.—To show the relationship of empathy to scholastic success and to derive implications for personnel workers from this experiment and philosophy.

Procedures.—Sample, 55 male college freshmen, who had taken the same core of subjects, were given test of empathy by I. E. Bender and A. H. Hastorf from *Journal of Abnormal and Social Psychology*, October 1958. A refined empathy score was derived by adjustment of empathy score and projection scores, with two subjects in each test. "L" scores on American Council on Education Psychological Examination and grades from official records were used. Statistical tests of the variables of empathy, intelligence, and scholastic success were made.

Major Findings.—Significance at 1-percent level of confidence between intelligence and grade-point average and between empathy and grade-point average, net correlation held constant. Correlation of empathy and intelligence not significant, net correlations held constant. Empathy is a separate quality. Implications: Development of empathy in students and teachers desirable; personnel workers and others should be encouraged to use and value empathy as a quality, which holds promise as a means for individual satisfaction and improved social group interaction.

COLE, FRANK LOVELAND. Identifying Gifted Children by Means of Group Achievement Tests. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Darrell Holmes.

Problem.—To determine a workable method of using standardized achievement tests as one means of screening children to identify the gifted child at the 4th- and 6th-grade levels.

Procedures.—Gifted and control groups were established for each achievement test used. The gifted group was composed of children in the San Diego City School Gifted Program, the control group of children with an IQ range of 90-110. Selection was on a stratified basis from the same schools. The extent to which subtests in the Metropolitan and Stanford Achievement Tests differentiated between the gifted and control groups was evaluated because these tests are routinely given on a districtwide basis in the 4th and 6th grades. Tabulations and percentile distributions were established for both these tests. Ratios were obtained, based on cumulative percentage of the gifted to that of the control group, permitting an objective selection of cutoff points for each subtest. Three methods were employed to evaluate the cutoff points, and the precision was then computed.

Major Findings.—Method 1 proved to have definite value as a means of screening children. Method 2 was less effective than the other two and Method 3 proved to be too stringent for general screening.

COCANNON, JOSEPHINE. Relationship of Actual Achievement to Potential Achievement in Reading and Study Skills of Gifted Pupils. (Ed. D., 1957, Boston College, Mass.)

Director of study.—F. Fraumeni.

Problem.—To analyze and study statistically the discrepancy between actual and expected achievement in reading and study skills. To put to rigorous statistical analysis the truth or falsity of the statement: "Gifted pupils are retarded."

Procedures.—Pupils in five different schools were tested for IQ and reading study skills. The selected group included 100 gifted (50 boys and 50 girls with IQ's 130 and above) and 100 average pupils (50 boys and 50 girls with IQ's 90-109). Test of homogeneity utilized Median Test and chi-square method. An analysis of variance for different variables was made.

Major Findings.—Both gifted and average showed retardation (discrepancy between actual and expected levels) in reading vocabulary, reading comprehension, total reading, and study skills. Average showed less discrepancy than gifted in variable studies. Boys evinced smaller retardation than girls in study skills (F ratio).

CONWAY, HARRY PATRICK. The Prediction of Success in Geometry at a Local Trade School by Use of Prognostic Geometry Tests. (Master's, 1957, University of Scranton, Pa.)

Director of study.—Lawrence J. Lennon.

Problem.—To determine the relative predictive value of certain prognostic tests to ascertain a student's success with practical geometry in a local trade school.

Procedures.—Subjects were 100 veterans of the Korea conflict. The prognostic tests were the Iowa Plane Geometry Aptitude Test, Lee Test of Geometric Aptitude, Form A, and the Minnesota Paper Form Board Test. The criteria were teachers' marks and the scores on the Seattle Achievement Test. These correlated .32 with each other, suggesting a difference in criteria. The first two prognostic tests correlated .44 with each other.

Major Findings.—The Iowa Plane Geometry Test correlated higher of the two prognostic tests with both teachers' marks and achievement test results, .50 and .54, respectively. The Paper Form Board correlated higher with both criteria than the Lee Test of Geometric Aptitude. Thus, the order of preference in use of the tests of prognosis was: Iowa Plane Geometry Test, Paper Form Board, and the Lee Test of Geometric Aptitude.

COOLEY, WILLIAM W. The Application of a Developmental Rationale and Methods of Multivariate Analysis to the Study

of Potential Scientists. (Ed. D., 1958, Harvard University, Cambridge, Mass.)

Director of study.—William W. Cooley.

Problem.—Identifying students who have both the aptitude and the predisposition to become scientists. (By "scientist" is meant someone who is practicing a vocation requiring at least 4 years of college study in one or more of the physical and biological sciences.) The specific problem was to see whether the career direction of students after 2 years of college could have been predicted from data available during high school.

Procedures.—The longitudinal data were made available by Dr. Paul Brandwein and collected by him and his associates at the Forest Hills (N.Y.) high school. The subjects were students who had voluntarily participated in a special science program between 1942 and 1953. The multiple-group discriminant function was the main statistical tool. Nine criterion groups and 19 variables were used and 3 discriminant functions were obtained.

Major Findings.—An overall variance-ratio test of the significance of the group separations leads to rejection of the hypothesis that the nine groups are random samples from a common population. A study of centroids and contours indicated that a few of the group differences are sufficiently large to provide practical information for the career guidance of similar students at this school. However, any practice of selecting students for, or barring them from, the special program on the basis of these results would not be reasonable, since all of the three nonscience groups greatly overlap at least one of the six science groups. A variety of factors affected each discriminant score: general intelligence, scholastic average, an active interest in science, abstract reasoning ability, and sex. In all cases, a combination of factors produced the group differences for each discriminant function.

CRIST, ROBERT L. A Study of the Mean Differences in the R, S, and T Traits of the Guilford-Zimmerman Temperament Survey for Upper and Lower Quarter Students on the Minnesota Teacher Attitude Inventory. (Master's, 1957, Purdue University, Lafayette, Ind.)

Director of study.—Lee E. Isaacson.

Problem.—To determine the main differences in the "Restraint", "Sociability", and "Thoughtfulness" traits of the Guilford-Zimmerman Temperament Survey (GZTS) for upper and lower quarter students of the Minnesota Teacher Attitude Survey (MTAI).

Procedures.—The subjects were 424 female and 352 male students majoring in education at Purdue University and enrolled in Psychology 230 between the period September 1954 and May 1956. The greater percentage were second semester sophomores and first semester

Juniors. For both males and females for each of the three GZTS traits mentioned above the MTAI subjects were divided into quartiles and the main GZTS trait scores for the upper quartile were compared with the main GZTS trait scores for the lower quartile. An analysis of variance was made between MTAI scores and GZTS trait scores to determine the degree of significance between scores on these tests.

Major Findings.—(1) As a group, those who score in the upper quartile of the MTAI show an appreciably greater degree of restraint than do those who score low. This is not true as to the Sociability and Thoughtfulness traits. High MTAI scorers show neither more nor less of these two traits than low scorers. (2) Females possess an appreciably greater degree of restraint than do men, are to a lesser degree more sociable than men, and are neither more nor less thoughtful than men. (3) Males who score high on the MTAI show an appreciably greater degree of restraint than those males who score low on the MTAI, but they are neither more nor less sociable or thoughtful. (4) Females who score high on the MTAI are neither more nor less restrained, sociable, or thoughtful than those who score low.

CROSSNOR, T. G. and BUEL, W. D. A Study of Creative Behavior in the Arts. (1957, The Ohio State University, Columbus.)

Directors of study.—M. Barkan, Jerome Hausman, and H. B. Pepinsky.

Problem.—To describe, understand, and predict the behavior of individuals engaged in artistic activity.

Procedures.—The subjects were two mature artists at work in their own studios. Interviews with the artists intended to isolate critical incidents in the creative process were conducted, and photographs obtained of their work as it progressed. Relevant literature was reviewed and summarized. The biographical information collected was analyzed in staff conferences to identify and account for activity that could be labeled "creative." Concurrently, work was begun on the development of a Creativity Syndrome in an attempt to describe and predict the behavior of the creative individual in four situations: social, casual interpersonal, intimate interpersonal, and working in the studio.

Major Findings.—Emphasis shifted from study of the creative product to the creative personality as the medium through which to predict behavior. The personality variables posited were independence, individuality, disorderliness, rebelliousness, disdain for regimentation, and disregard for social sanctions.

DAMM, DONALD DWIGHT. A Test Comparison of Two College Freshman Classes.

(Undergraduate Thesis, 1958, John Carroll University, University Heights, Ohio.)

Director of study.—Walter S. Nosal.

Problem.—To compare the entering freshmen of John Carroll University in 1957 with the entering freshmen of the same university in 1956. The annually administered standardized tests to entering college freshmen served as a basis for this comparison. Through administration of the *t*-test of reliable difference it may be determined whether or not the freshman classes are significantly different in their ability.

Procedures.—The results of the 1956 and 1957 standardized tests were compiled by using the frequency distribution method. From the frequency distribution of each test, the mean, standard deviation, and the standard error of the mean were calculated, using the standard formulas. The *t*-test of reliable difference was applied to determine if there was a significant difference between the two sets of scores.

Major Findings.—(1) The 1957 freshman class at John Carroll University was not significantly different from the 1956 freshman class in tested ability as entering freshmen. (2) The percentile rank of the 1957 freshman class on the SCAT test and mathematics test show that the class stands higher than the national mean for entering college freshmen. However, the English mechanics and reading test results of the 1957 class fell below the national mean.

DAWKINS, JEWEL M. B. An Internal Analysis of the Personal Judgment Scale Based on Responses of Male and Female Freshmen at the University of Texas. (Master's, 1957, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To provide a better understanding of the newly constructed Personal Judgment Scale (PJS) developed at the University of Texas by Peter B. H. Dawkins as part of his doctoral research work. The PJS, a 50-word, adjectival checklist, followed the Bills Index of Adjustment and Values, but included rating sets and only positive words. It was given to about 2,000 freshmen at the University of Texas in September 1955.

Procedures.—The PJS calls for use of a 5-point rating ranging from 1 (Not at All) to 5 (Extremely). Scores are secured for Self-Concept (SC) (I Am); Self-Acceptance (SA); (How Much Do I Like?), Super Ego (SE) (Ought To Be), and the SE-SC Discrepancy or d-score. PJS trait words are judged into the following Dimensions of Self: Intellectual, Emotional, Social, Physical, and Motivational. Samples of 100 male and 100 female freshmen were used to determine the split-half reliability of ratings and

interrelationships among ratings. Samples of 50 male and 50 female freshmen were used to study the effectiveness of trait words. The principal statistics used were *t* and *F* tests, Pearson *r*, the Spearman-Brown formula and a special process for operational analysis of the words.

Major Findings.—(1) Split-half reliability coefficients ranged from .92 to .97 for the male and female samples. Reliability coefficients for the Discrepancy scores were .84 for males and .82 for females. (2) The SA rating produced large standard deviations with both males and females, in comparison with the SC and SE ratings. (3) Correlations among the scores were as follows, for males and females, respectively: SC-SA = .52 and .63; SC-SE = .34 and .66; SC-D = -.49 and -.21; SA-SE = .17 and .35; SA-D = -.27 and -.11; SE-D = .78 and .58. (4) Females had significantly higher SC scores than males and proportionately lower D scores, and also tended to have higher SA scores. (5) In the analysis of words, according to the Dimension of Self classification, the most effective words were: (1) Intellectual = Accurate, Alert, Creative, Studious; Emotional = Calm, Happy, Merry, Stable; Social = Considerate, Dependable, Friendly, Tactful; Physical = Coordinated, Fashionable, Healthy, Presentable; Motivational = Ambitious, Competitive, Purposeful, Successful.

DAWKINS, PETER B. H. The Construct Validity of a Self-Rating Scale. (Ph. D., 1957, The University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To determine the construct validity of a newly developed self-rating scale called the Personal Judgment Scale (PJS). This instrument was a 50-word, adjectival checklist, derived in part from the Bills Index of Adjustment and Values. A 5-point scale ranging from "Not At All" to "Extremely" was used, and only positive words were included.

Procedures.—Scores were secured for Self-Concept (I Am), Self-Acceptance (SA—How Much Do I Like?), Super Ego (SE—Ought To Be), and the SE-SC discrepancy or d score. PJS trait words were judged into the following Dimensions of Self: Intellectual, Emotional, Social, Physical, and Motivational. The rating scale was administered to approximately 2,000 freshmen who entered the University of Texas in September 1955. The PJS scores were used to study various samples of freshmen in terms of whether or not they sought counseling at the student center, their choices of major fields, and why certain unexpected score patterns existed. The principal statistic was analysis of variance.

Major Findings.—(1) The lowest split-half reliability coefficient for the SC, SA, and SE ratings was .92. The lowest test-retest coefficient, across 4 weeks, was .71; (2) students

who did and did not seek counseling could not be significantly differentiated in terms of scores on the PJS: counseled female freshmen, however, showed less self-acceptance and made larger d-scores than noncounseled male and female freshmen; (3) scores on the PJS did clearly discriminate among eight groups of male freshmen who had been categorized according to their curricular choices; (4) the five Dimensions of Self were significant sources of variation in all analyses of variance in which they were employed; (5) relationship between self-acceptance and d-score varied from one Dimension of Self to another, behaving in accord with conventional self-theory in some cases.

DRENNEN, CHARLAIN. An Investigation of the Phenomena of Extrasensory Perception Using Blind Subjects. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—Cecil O. Samuelson.

Problem.—To determine whether certain phenomena, attributed to ESP, occur with the blind, and whether they are a result of ESP or SSP.

Procedures.—Four different sets of conditions were imposed on each subject to provide for a progressive reduction of possible cues from one set to the next, the first set allowing for maximum cue possibilities and the last, for no cues whatsoever. Standard statistical procedures were used in analyzing the results.

Major Findings.—(1) Of eight subjects tested, one was able to demonstrate the phenomena to quite a marked degree. One other subject demonstrated it slightly and five others had one significant score each, but nothing definite can be stated about these five. (2) The magnitude of the t values indicated that in some sets, ESP seemed to have been operating, while in others the results could have been explained by SSP. (3) Clairvoyance did not appear to have operated in this study, in terms of (0) hits, at least not by itself. (4) Delayed reaction was noted in both ESP and SSP scores. (5) Belief or disbelief in ESP could have affected performance. (6) Scores significantly lower than expectation may indicate a tendency to dodge the correct responses. (7) Performance varied with changes in experimental procedure.

DROMAZOS, PAUL C. A Comparison of Columbia Mental Maturity Scale, Lorge-Thorndike, Stanford-Binet (Form L), and Iowa Silent Reading Tests. (Master's., 1957, Alfred University, Alfred, N.Y.)

Director of study.—Joseph L. Norton.

Problem.—(1) To compare IQ scores obtained with the three intelligence tests in title.

(2) To compare each score with current school achievement as measured by reading test.

Procedures.—Each of the four instruments was administered to 30 6th-grade children, a complete class in an elementary school. Mean IQ's on the intelligence tests were compared by F and t tests; the intelligence tests were correlated with scores on the reading tests.

Major Findings.—Differences with significant t's were as follows (each significant at the 1-percent level): CMMS vs. Binet, 16.53; CMMS vs. Lorge-Thorndike Total, 13.37; CMMS vs. Lorge nonverbal subtest, 17.03. The Lorge-Thorndike and the Binet were not significantly different. Correlations of the Iowa Silent Reading Scores with the other three tests were: CMMS, .47; Binet, .71; Lorge-Thorndike Total, .72; Lorge-Thorndike Verbal, .79; Lorge-Thorndike Nonverbal, .53. This indicates that the Columbia Mental Maturity Scale should be used with caution. Although the scale was devised for disabled children, its use in the study of a heterogeneous, normal population indicates that the scores are significantly higher than scores obtained with other accepted measures of intelligence. There is support here for the validity of the paper-and-pencil Lorge-Thorndike Intelligence Test.

EDWARDS, WILLIAM B. Some Relationships Among the Aptitudes, Interests and Achievement of Freshmen Engineers. (Master's, 1957, Duke University, Durham, N.C.)

Director of study.—Henry Weitz.

Problem.—(1) To test the validity of the Yale Educational Aptitude (YEA) Tests and the Kuder Preference Record with respect to Duke University engineering students. (2) To determine the relationships between these two measures, and (3) to develop more data on them for counseling Duke engineering students.

Procedures.—(a) Subjects: All freshman engineers (165) who entered in 1954. (b) Correlation methods and profile pattern analysis.

Major Findings.—Although some relationships were found between the subtests of the instruments and between these and academic performance, too little would be gained by adding the best Kuder subtest to a multiple regression involving YEA and academic achievement. All tests appeared useful in clinical prediction, however.

ESSIG, JOAN DARLENE TINGEY. The Use of Psychometric Tests in the Selection of Power Sewing Machine Operators. (Master's, 1956, Utah State University, Logan.)

Director of study.—Arden Frandsen.

Problem.—To find usable psychometric tests for the sewing machine industry to help

screen applicants for power sewing-machine operators.

Procedures.—A battery of six psychometric tests was chosen, based on the results of a job analysis. These tests were given to 20 Negro power sewing-machine operators in a costume manufacturing factory. The results were then correlated with supervisor ratings of the operators and work samples.

Major Findings.—(1) All the correlations between the supervisor ratings and the tests were very low, ranging from .20 to .31. (2) Negative correlations appeared between the time and error of the work samples. (3) Only the Wechsler Block Design and O'Connor Tweezer Dexterity tests had any significant correlations with criteria used. None of the correlations was significantly high or consistent enough to establish cutting scores for the various tests.

FISCHER, WALTER OTTO. Scholastic Aptitude and Spatial Visualization in Relation to Success in Business Administration Curricula. (Ph. D., 1957, University of Denver, Colo.)

Director of study.—Harry R. Moore.

Problem.—(1) To study relationships between general college aptitude test scores and success in an accounting curriculum. (2) To test the hypothesis that students in a specific major field in accounting will have certain unique characteristics when compared with a general population.

Procedures.—ACE Psychological Examination and Space Relations Test of DAT battery used on 171 D.U. business students. Scores were correlated with successful graduation from college and with grade-point averages. Students divided into accounting and nonaccounting categories for further statistical measurements.

Major Findings.—(1) The ACE Psychological Examination appears as a valid predictor of college success. Significance was beyond 5 percent level. (2) The Space Relations Test of the DAT did not afford significant predictive results. (3) The verbal area of the ACE seems a better predictor of future success for nonaccounting students, whereas the quantitative area of the ACE seems better for accounting students.

FREEMAN, BEN BARUCH. Evaluating W-A-Y Technique in Relationship to Measurement and Stability of the Self-Concept. (Ph. D., 1956, University of Denver, Colo.)

Director of study.—Daniel D. Feder.

Problem.—(A) To explore the hypothesis that the W-A-Y Technique measures "personal adjustment." (B) To identify relationships between the W-A-Y and the facets measured by

the Rotter's Incomplete Sentence Test. (C) To evaluate reliability of the W-A-Y.

Procedures.—Longitudinal study of the W-A-Y, using its questionnaire form together with the Rotter Test, plus a personal standardized interview. Original "N" of 250 D.U. freshmen students, fall, 1954, was reduced to 90; they were retested, spring 1956. Statistical correlates of W-A-Y, Rotter, and W-A-Y-Rotter used. (Pearson correlations.)

Major Findings.—(1) It is questionable whether the W-A-Y Technique is a valid measure of personal adjustment. (2) Measuring devices may not have tapped a unitary psychological characteristic. (3) Apparently no relationship exists between the W-A-Y and the Rotter Incomplete Sentence test. (4) The Rotter appears to be internally inconsistent (unreliable) in terms of relationships between Rotter total items and specific internal items.

FREEMAN, TOM S. Social Status as a Predictor of Academic Success. (Master's, 1958, Colorado State University, Fort Collins.)

Director of study.—Carroll H. Miller.

Problem.—To determine whether the accuracy of prediction of academic success is changed by adding the social status factor to other predictive factors.

Procedures.—Seventy-four individuals, the total number among Colorado State University freshmen who had graduated from Fort Collins high school in 1957, formed the sample. The College Ability Tests (CAT) and the high school class rank of each individual were obtained from the admissions office; and home address, father's occupation, and first-quarter grade-point average from the student personnel office. Each student was scored on the basis of the Warner Index of Status Characteristic. Intercorrelations were obtained for the CAT, high school rank, father's occupation, source of income, and house type. An analysis of variance was made to determine the increase of efficiency of prediction by adding the social-status factors.

Major Findings.—CAT scores and high school class rank contributed the most to prediction of academic success. The combined social-status factors added only 3 percent to the portion of the variance accounted for by the CAT scores and the high school class rank.

FRIESCHE, MILO C., Jr. Predicting Achievement. (Master's, 1958, Miami University, Oxford, Ohio.)

Director of study.—R. W. Edmiston.

Problem.—To determine the factors of capacity, adjustment, and interests with highest relationships to measured achievement in social science, science, mathematics, and English.

Procedures.—The factors involved in the correlations of the four subject fields were verbal, number, social, reasoning, and total capacities; home, health, self, social, school, and total adjustments; how-to-study; social, journalistic, science, and computational interests. Study used 144 cases. Best multiple R with the resulting regression equation reported in each case.

Major Findings.—Capacity scores provide best predictions and special capacity scores add to the predictions provided by total capacity scores. How-to-study, interests in all cases except social science, and adjustments in the case of science only, indicate some value of these factors for guidance. The use of the regression equations to select able students is explained.

GILES, EUGENE. The Coefficient of Temporal Stability in the Lorge-Thorndike Intelligence Test Series. (1959, University of Idaho, Moscow.)

Problem.—To obtain stability of IQ of students at successive levels of Lorge-Thorndike Intelligence Tests.

Procedures.—An entire school system was given the appropriate level of tests on both verbal and nonverbal portions of Lorge-Thorndike Intelligence Tests in 1955 and again in 1958. Correlations were computed between performances on the two administrations.

Major Findings.—Tentative results show: (1) Relatively low coefficients between results from levels 1 and 2 to level 3. (2) Relatively high coefficients between levels 3 and 4 and between levels 4 and 5. (3) Combining IQ scores and averaging verbal and non-verbal scores produces stable index in levels 3, 4, and 5. (4) Initial hint that Lorge-Thorndike manual is in error in not providing norms for combined scores.

GISVOLD, DARRELL I. A Validation Study of the Autonomy and Deference Subscales of the Edwards Personal Preference Schedule. (Master's, 1956, Montana State University, Missoula.)

Director of study.—Thomas C. Burgess.

Problem.—To obtain an empirical estimate of the validity of the Autonomy and Deference subscales of the Edwards Personal Preference Schedule (EPPS), using conformity to group opinion as the criterion.

Procedure.—Subjects, 31 male and 19 female volunteer college students from elementary psychology classes, were tested for conformity in groups of 4, using a modification of Crutchfield's procedure and of Asch's stimulus lines. Subjects were led to believe that each was the last to judge the length of stimulus lines, and were given information about what the first three members of the group had said. S's conformity score was the number of times his

responses erred toward the responses which he had been told other group members had made.

Major Findings.—The correlation between conformity behavior in the experimental situation and the Autonomy subscale of the EPPS was $-.54$. The correlation between conformity and scores on the deference subscale of EPPS was $.17$ (not significant at .05 level). The data also indicated significant positive correlations of conformity scores with Nurturance (.39), Abasement (.33), and Dominance (.30). No other subscales showed a significant correlation with conformity scores.

GOLDING, GRACE JESSOP. An Investigation of the Relationship Between Mental Ability Profiles and Scholastic Achievement of Elementary School Children. (Master's, 1956, The Colorado College, Colorado Springs.)

Directors of study.—William Blakely, Joseph Royce.

Problem.—To investigate the relationship between the mental ability profiles and scholastic achievement of elementary school children, in the hope that the feasibility of the technique of profile analysis as a method of indicating differential ability patterns might be evaluated. How widely do the ability patterns of children of the same intelligence level (100 IQ) differ? Are these differing ability profiles reflected in differential achievement? To what extent does it seem profitable to treat these profiles as patterns rather than discrete scores?

Procedures.—Product-moment correlation coefficients between two achievement test scores and the five composite factors of the SRA Primary Mental Abilities Test subscores were computed. (The achievement tests were the California Test of Mental Maturity, the California Arithmetic Test and the California Reading Test.) One hundred children were selected from five elementary schools in San Bernardino County, Calif., as sampling population. IQ 85-105; 51 boys, 49 girls.

Major Findings.—(1) Coefficients indicated a significant positive relationship between each of the subtests of the P.M.A. battery and the achievement test in arithmetic. The index met 1 percent standard. (2) Coefficients indicated a significant positive relationship between reading achievement and P.M.A. and subtests described as verbal, perception, reasoning and number. (Twelve other major findings are included.) A t-test analysis showed a difference between the means of profile sets significant at the one percent level. Most interesting generalization: In such a homogeneous group there are not only differential profiles but also large numbers of average children.

GOODEY, DARWIN J. The Diagnostic Uses of the Reading Tests of the Stanford Binet Intelligence Scale. (Master's, Utah State University of Agriculture and Applied Science, Logan.)

Director of study.—Arden Frandsen.

Problem.—To determine the usefulness of the Reading Test, Item 3, Level X, of the Stanford-Binet Intelligence Scale, Form L, in diagnosing reading errors and disabilities, and in determining the quality of an individual's reading ability. The problems: (1) To determine how accurately the one-paragraph test will diagnose disabilities. (2) To evaluate the quality of oral reading of each child. (3) To evaluate the comprehension of the material read by each child. (4) To compare the diagnostic value of this one-paragraph test with a longer, standardized reading test, by determining correlation coefficients between the two tests.

Procedures.—A total of 155 students were used, ranging in age from 6 through 11 years, and made up of all students from one of the classrooms at each level. The validating test selected along with the Binet card was the Gilmore Oral Reading Test, Form A, by John V. Gilmore.

Major Findings.—The correlations between the two tests show a moderately high to high relationship between the two tests. It is assumed that the Binet paragraph yields valid measure of a child's oral reading ability within certain limits when it is compared with the longer Gilmore Oral Reading Test.

GORDON, CAROL E. A Study of Trends in Scholastic Prediction Data at the University of Utah. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—Frank B. Jex.

Problem.—A followup study of previous prediction research at the University of Utah to investigate the years 1950 through 1954 as to: (1) What is happening to the first-quarter grade-point average which was found by previous investigators to be an adequate criterion of college achievement? (2) What is happening to the level and variability of the predictors, i.e., the Cooperative Achievement Tests and high school grade-point averages? (3) What is happening to the relative weights of the predictors in contributing to the multiple correlation with first-quarter grade-point averages? (4) How do the data computed for this study compare with similar research for the previous 5-year period?

Procedure.—The Cooperative Achievement Test scores and high school grade-point averages were recorded for random samples of 100 freshman students for each of the years 1950, 1951, 1952, 1953, and 1954. Means, standard deviations, correlation coefficients, and multiple correlations were computed on the basis

of these scores, using the first-quarter grade-point averages as the criterion of academic success. These statistics were then compared to those for the years 1945 through 1949.

Major Findings.—(1) It appears that the University of Utah's use of high school grade-point averages, Cooperative English test scores, and Cooperative Natural Science scores in its prediction formula continues to be the best combination of variables available. Moreover, the use of these variables increases the predictability of future academic success to an extent which justifies the time consumed in arriving at predicted grade-point averages for each student. (2) Increased attention should be given to differential prediction of men and women students since women appear to be considerably more predictable in their academic performance at the University of Utah than do men.

GRANT, ROBERT GAINES. A Q-Technique Study of Characteristics of the Hypothetical "Ideal" College Graduate. (Ph. D., 1956, University of Utah, Salt Lake City.)

Director of study.—Gerald H. Shure.

Problem.—To identify some specific attributes, chiefly nonintellective, which might characterize a hypothetical ideal college graduate; to find specific areas of agreement and disagreement between individuals and/or professional groups (members of a university faculty and executives in business and industry) as to their concepts of this ideal; and to appraise the appropriateness of Stephenson's Q-methodology for the study.

Procedures.—The primary instrument for the investigation was based on Maslow's portrayal of "self-actualizing people." The "trait universe," consisting of 90 items concerning attitudes, values, and behavioral attributes, was administered on an individual basis to 6 faculty subjects from each of 3 academic divisions of the University of Utah (business, education, and engineering); and to 6 Salt Lake City business executives, making a total of 24 subjects. Their instructions, basically, were to perform a Q-sort with the statements by ranking them in approximately normal distribution on an 11-point scale (0 to 10), so as to characterize their concepts of an ideal college graduate. The 24 Q-sorts were intercorrelated, and factor analysis of the matrix resulted in the identification of four factors.

Major Findings.—(1) It appears possible to devise explicit descriptive statements which can be used to define operationally a concept such as that of the hypothetical ideal college graduate. (2) The statements appeared to identify certain areas of agreement between individuals and groups. They did not indicate much disagreement, but many did identify differences between individuals and groups in the relative importance of some character-

istics of this ideal over others. (3) Q-methodology appears to offer a means whereby the second purpose can be accomplished. This technique permits intensive analysis of a rather broad concept, many aspects of which are qualitative in nature. (4) A considerable diversity exists between members of the University of Utah faculty and Salt Lake City business executives as to characteristics they believe should be fostered in college students.

GRIMES, JESSEE W. Age Discrimination in Intelligence Tests. (Master's, 1956, Utah State University of Agriculture and Applied Science, Logan.)

Director of study.—Arden Frandsen.

Problem.—To provide a better understanding of the Kuhlmann-Finch and the Davis-Eells Games Intelligence Tests and to evaluate their usefulness as tools in the elementary school.

Procedures.—The Kuhlmann-Finch Intelligence Test, the Davis-Eells Games Intelligence Test, and the Iowa Every Pupil Tests of Basic Skills were administered to 56 5th-grade students. Also, the WISC was administered to a control group (28) of the 56 subjects. Correlations were computed between the intelligence test scores, the grade equivalent on each achievement test, and also the median grade equivalents.

Major Findings.—(1) In every measure of achievement, the Kuhlmann-Finch yielded higher coefficient of correlations than did the Davis-Eells. However, a t-test of significance indicates that the difference between the correlations was significant. (2) Both tests proved a valid measure of intelligence by correlating significantly with the Wechsler Intelligence Scale for Children. (3) Although no statistical significance was obtained, a significant trend showed that the Kuhlmann-Finch was a better predictor of achievement at this 5th-grade level.

HALE, LUCILLE. Evaluation Study of the Aptitude Testing Program in Algebra and Geometry for Predicting Probable Success in Algebra and Geometry. (Master's, 1957, The University of Akron, Ohio.)

Director of study.—William I. Painter.

Problem.—To evaluate the aptitude testing program in algebra and geometry for predicting the probable success in those subjects, directed by the following questions: (1) Is there a significant degree of relationship between aptitude test scores and achievement scores? (2) Should intelligence test scores also be considered as a factor? (3) Can the counselor be reasonably accurate in predicting probable success or failure from algebra and geometry aptitude test scores?

Procedures.—Techniques used: (1) Iowa Aptitude Tests in algebra and geometry. (2)

The teacher's marks; in addition, achievement tests at the end of the first semester. (3) Results from the aptitude tests, achievement tests, teacher's marks, and IQ tests. (4) These data were used in product-moment correlations, multiple correlations, and partial correlations.

Major Findings.—To insure any high degree of success in predicting probable achievement in algebra and geometry several tools should be used. The predictive value of the aptitude tests alone was not nearly so effective as when used in combination with IQ test scores; but even used alone, they are better than using no device at all.

HALL, RAYMOND W. A Research Paper Presented to the Supervisors and Employees of the Veterans Administration Hospital at Fort Bayard. (1958, New Mexico Western College, Silver City.)

Director of study.—Gladys Bookman.

Problem.—To determine, by use of the attitude survey, the type of supervision at the hospital under study, whether autocratic or democratic; its strength and its weaknesses; and the area needing improvement.

Procedures.—A two-question, multiple-choice questionnaire (composed of objective items related to the respondents' attitudes towards their jobs, the agency, their fellow workers, and their supervisors) was designed for line and staff supervisors and employees. The surveys, taken from the Southern California report, *Factors Influencing Organizational Effectiveness*, by Comrey, Phlffner, and High, had been revised by the Veterans' Administration Hospital, Saginaw, Mich., and were then further modified to meet the needs of the supervisory situation at the hospital under study.

Major Findings.—The employees had a feeling of group unity, believed that they should act as a group, and seemed to have a feeling of "togetherness." They indicated a definite pride in their work group and preferred to work with this group rather than with other groups at the hospital. The employees further indicated a definite lack of participation in group meetings and conferences and seemed to feel that conferences were a one-sided affair, with the supervisor doing all the talking while employees listened.

HAMMOND, MARJORIE. A Measure of Attitudes Held by "Successful" Students in the College of Engineering at The Ohio State University. (1958, College of Engineering, The Ohio State University, Columbus.)

Director of study.—H. B. Pepinsky.

Problem.—To determine whether survivors of a 5-year curriculum in the College of Engineering are most likely to be those students

who are able to conform to the research and development expectancies of the college; i.e., whether students who are easily reoriented are more likely to succeed than students who are not.

Procedures.—Subjects were 47 students in the College of Engineering who in 1953 had taken the Occupational Attitude Rating Scales as freshmen in engineering, and who in 1958 had attained senior rank or better. They were administered a retest of the OARS under supervision, and the t-test of significance was applied to determine differences between the students' mean raw scores in 1953 and their mean raw scores in 1958. Additional subjects were five administrators in the College of Engineering who took the OARS in 1958, playing the role of a typical engineering student as they saw him. A random sample was drawn from the answer sheets of students who had taken the OARS in 1953 and had entered the College of Engineering, but had not survived. The t-test of significance was applied to determine differences between survivors and non-survivors, survivors and administrators as of 1958, and survivors as of 1953 and administrators.

Major Findings.—Statistically significant changes in attitude had occurred in the group of 47 survivors of the 5-year period, and the total group could be divided into two subgroups on the basis of vocational choice on the retest. Those planning research and development, or related careers (N=35), had come to value more highly self-expression and recognition, and less highly money and structured situations. Those planning sales, management, or teacher careers (N=12) had altered their values in the same ways, but in addition had a greater concern for people. There seem to be grounds for inferring that students who survived the 5-year curriculum in the College of Engineering did learn to conform to expectancies of the college, and that those expectancies were largely centered on research and development. In the process, those students who survived reoriented themselves significantly.

HANSMEIER, THOMAS WILLIAM. A Study of the Relationship Between Twelfth-Grade Performance on the Iowa Tests of Educational Development and Freshman in College Grade-Point Index. (Master's, 1957, Iowa State Teachers College, Cedar Falls.)

Director of study.—Gordon Rhum.

Problem.—To investigate the usefulness of the Iowa Tests of Educational Development in predicting first-year college achievement at Iowa State Teachers College, and the specific ways in which the test scores could be utilized by I.S.T.C. officials responsible for admissions and counseling; and to explore certain interrelationships among a number of variables,

including both high school and college freshman indexes.

Procedures.—The population was the 1,252 I.S.T.C. freshmen in the fall of 1954. The selected sample of 401 was composed of those who were: (1) single, (2) nonveteran, (3) graduated from high school in 1954, and (4) enrolled in college for the first time.

Major Findings.—(1) Composite score on the Iowa Tests of Educational Development was the best single predictor of college grades: the r was .711. (2) A substantial degree of relationship existed between college grades and each of the individual tests. (3) The sum of the scores of the three reading tests of the ITED battery correlated .657 with ITED composite score. (4) Percentile rank in high school graduating class yielded an r of .657 when correlated against college grade point index. (5) Of the six Placement test measures, the best predictor of college success was total score on the Nelson-Denny Reading Test. It yielded an r of .620 when correlated against freshmen grade index. Of the 18 predictive variables employed in the present study, the A.C.E. Examination, Q-score, was least useful. It correlated only .382 with college grades. (6) In general, the high school indexes—grade ITED scores and percentile rank in high school class—were more closely related to college academic success than were college Placement Test scores. (7) Of the objective tests employed in the present study, those reflecting reading proficiency were the best predictors of college success. (8) The best prediction of college success was achieved by combining ITED composite score and percentile rank in high school graduating class. This combination correlated .768 with first-year college achievement. (9) The ITED composite score-college grade point correlation of .711 was increased to R 's of only .717 and .712 by addition of total scores on the Nelson-Denny Reading Test and A.C.E. Psychological Examination, respectively.

HARDIE, JAMES F., JR. The Use of Faculty Ratings, Peer Ratings, and Self-Rating in the Appraisal of Seminary Students. (Master's, 1957, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To analyze the Faculty, Peer, and Self-ratings of theological seminary juniors on three traits considered important to success in the ministry, and to study the relation of these ratings to a number of scores derived from measures used in selection and counseling students. The subjects were students who entered the Austin Presbyterian Theological Seminary, Austin, Tex., in September 1954.

Procedures.—Twenty-six students were ranked by three faculty judges, their classmates, and themselves on three carefully described traits: (1) Academic Potential, (2) Reliability, and (3) Pastoral Qualifications. The objective

measures used were the Miller Analogies Test, the Diagnostic Reading Test, the Minnesota Multiphasic Personality Inventory, the Guilford Inventories of Factors STDCE and GAMIN, and the Allport-Vernon-Lindsey Study of Values. Statistics utilized were Pearson r , Fisher z , Rank Order correlation, and the t and F tests.

Major Findings.—Ratings made in the fall with an open scale rather than rank order produced reliable agreement only with Trait 1. Trait ratings were badly contaminated by the reliable Academic Potential rating and it was necessary to establish global Faculty and Peer ratings. The Self-ratings were distinct and were held for Academic Potential, Reliability, and Pastoral Qualifications. Correlations of scores on the Miller Analogies Test with Faculty, Peer, and Self ratings of Academic Potential were .65, .69, and .63, respectively. The 10 strongest men were compared with the 10 weakest men in terms of scores on the various tests and inventories, showing a tendency for men viewed as strong by faculty and peers (in close agreement) to appear more theologically inclined (high MAT, high DRT, high Religious Value, low scores on Guilford S, R, and G).

HARPER, WOOD THOMAS. The Reliability and Validity of the Texas Occupational Interest Analyzer When Used With High School Students. (Master's, 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate the effectiveness with which the Texas Occupational Interest Analyzer (TOIA) could be used with boys and girls in the 10th and 12th grades. Subjects were several hundred boys and girls in the secondary schools of four Texas communities during the 1956-57 school year.

Procedures.—The Occupational Interest Analyzer (a paired-comparison measure with separate forms for males and females) was given to the subjects along with the Kuder Preference Record (Vocational). The two principal facets of the study were: (1) Investigation of the split-half reliability of the TOIA as used with high school boys and girls; and (2) comparison of TOIA scales with logically related scales of the Kuder Preference Record. Principal statistics used were Pearson r , Fisher z , Spearman-Brown formula, and t and f tests for comparing the mean scores made by boys and girls in the 10th and 12th grades.

Major Findings.—(1) Few significant differences were found between 10th-grade and 12th-grade samples within each sex, but the conventional sex differences in interest were found. There was little difference between sexes with regard to interest in language occupations. (2) Corrected split-half reliability coefficients (averaged by s across four

groups) ranged from .53 to .75. The language scale was least reliable and the art and scientific scales were most reliable. Scales included only 20 items each. Coefficients were slightly higher with seniors than with sophomores. (3) Internal analysis indicated that the TOIA scales were quite separate and distinct in terms of the scores of these high school students. (4) Correlations between TOIA scales and logically related Kuder scales (averaged by s across four groups) ranged from .142 for People-Social Service to .64 for Scientific-Scientific. The mean r for the six scales was .54.

HARRIS, YEUELL Y. and ARTHUR A. DOLE. The Differential Aptitude Test Battery as a Tool for Counseling High School Students Who May Attend the University of Hawaii. (1958, University of Hawaii, Honolulu.)

Problem.—To establish the applicability of the DATB as predictor of academic success at the University of Hawaii; to enrich, improve, and encourage sound counseling of high school youth in college planning; to demonstrate to local guidance and administrative personnel the values of a longitudinal approach in meeting a familiar problem; and to serve as a source of ideas for further more elaborate studies.

Procedures.—Data were collected from the files of University of Hawaii and Roosevelt High School on 221 applicants for admission to the University in spring 1951, all of whom were seniors at Roosevelt. Using a longitudinal design, DATB taken in 1949, and ACE and OSPE taken in 1951, were considered as predictors. Criteria included university acceptance, entry, continuance, college grades as of spring 1952, and spring 1956.

Major Findings.—(1) All DATB except Language Usage—Spelling, were significantly related to college success in first year. Verbal Reasoning and Language Usage—Sentences—were the best predictors (r .52, .56) of first-year grades and of OSPE score (.74, .72). (2) Verbal Reasoning (.34), Abstract Reasoning (.30), Language Usage—Sentences (.33) and OSPE (.32) correlated significantly with the 4-year grade-point average of the 55 students who eventually graduated. (3) Those who were refused admission to the university or who were dropped for scholastic reasons had lower scores on all psychometrics. In general, the high school students who were accepted but did not register, or who entered but transferred to other colleges, or discontinued higher education before graduating, were similar psychometrically to those who eventually graduated from the University of Hawaii.

HASSE, DEREK M. A Manifest Structure Analysis of Student Information

Files. (Master's, 1957, Montana State University, Missoula.)

Director of study.—Frank M. duMas.

Problem.—To try out Frank M. duMas' procedure, manifest structure analysis, by attempting to construct "clustery" and "segmental catescales" from student information files which would predict academic success in college.

Procedures.—The development of the scales was based on biographical information, ACE scores, and Cooperative English test scores (information routinely available on students entering Montana State University) from a random sample of 100 freshmen entering fall quarter, 1950. Scaling used procedures developed by duMas and referred to as manifest structure analysis. One "clustery catescale" and one "segmental catescale" were derived from this information using grade-point average in college as the manifest or criterion variable. Correlations between scale scores and grade-point average were computed for this group and for two cross-validation samples drawn at random from the freshman groups of 1951 and 1952.

Major Findings.—Correlations between grades and the segmental catescale were: .583 for the 1950 group; .453 for the 1951 group; and .373 for the 1952 group. Correlations between grades and the cluster catescale were: .492 for the 1950 group; .392 for the 1951 group; and .184 for the 1952 group. These correlations were sufficiently high to be useful in predicting academic success, and to demonstrate the usefulness of biographical data in making these predictions. The study further demonstrated the economy and effectiveness of manifest structure analysis in the treatment of this type of data.

HAYWOOD, HERBERT CARLTON. Some Relationships Between Anxiety Level and Ability To Predict the Anxiety Levels of Peers. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Hilding B. Carlson.

Problem.—To test the hypothesis that anxiety level is inversely related to ability to predict the anxiety levels of peers, and that accuracy of prediction of anxiety levels among closely associated groups exceeds that of casually associated groups.

Procedures.—The anxiety questionnaire (A.Q.) was administered to 110 subjects in 5 groups, representing 5 degrees of closeness of association. Each subject ranked other members of his group. The A.Q. was developed from items in the Minnesota Multiphasic Personality Inventory and the California Personality Inventory. The first hypothesis was tested by prediction accuracy scores ranked and correlated with the subjects' A.Q. scores, and by a chi-square technique involving all subjects in all groups combined.

The second was tested by ordering the five groups according to closeness of association, and by arranging the prediction accuracy scores in rank order sequence from the highest accuracy to the lowest. By means of the median sign test, the scores were dichotomized. Frequencies were computed for each group.

Major Findings.—First hypothesis test: each of the five computed coefficients was positive but none was statistically significant. Second hypothesis test: the chi square of 14.52 indicated differences among the groups significant beyond the .01 level. Some nonlinear relationship was indicated between closeness of group associations and anxiety-prediction accuracy. The groups with moderate closeness of association had significantly higher prediction accuracy than did the extreme groups.

HIRT, MICHAEL LEONARD. Use of the General Aptitude Test Battery To Determine Aptitude Changes With Age and To Predict Job Performance. (Ph. D., 1958, University of Nebraska, Lincoln.)

Director of study.—Charles O. Neldt.

Problem.—To determine the relationship between age and GATR scores, and to relate these to on-the-job performance as a criterion.

Procedures.—Four hundred subjects were sorted into age groups (25 to 34; 35 to 44; 45 to 54; 55 and older). GATR and job performance were analyzed for each group, using an analysis of nonlinear regression.

Major Findings.—Aptitudes G, V, N, and S were related to age in a curvilinear manner, reaching their peak at ages 37; 31, 32, and 30, respectively, and then beginning to decline; when the best prediction scheme of the criterion was sought, it was found that only aptitude K contributed significantly to predicting the variance in the criterion.

HOLLER, JAMES CLIFFORD. A Comparative Study of the Tested Abilities of Freshmen Entering John Carroll University in 1952 and 1956. (Undergraduate Thesis, 1957, John Carroll University, University Heights, Ohio.)

Problem.—To compare the ability of entering freshmen at John Carroll University in 1956 with entering freshmen at the same university in 1952.

Procedures.—Both groups were administered similar tests, the 1952 class taking the ACE test and the 1956 class the SCAT. The comparison was made by administering the t-test of reliable differences.

Major Findings.—(1) The 1956 entering freshman class at John Carroll University was significantly different from the 1952 freshman class in tested ability at the 15-percent level of confidence. (2) The percentile rank of the 1956 class was also higher than the national mean for entering college freshmen; however,

the English mechanics and reading test results of the 1956 class fell below the national mean, but the 1956 class appeared proficient in mathematics.

JORDY, GERTRUDE BARNES. The Rorschach as an Objective Measure of Adjustment and Its Relationship to Academic Achievement. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Wolcott C. Treat.

Problem.—The relation of adjustment as measured by the Group Rorschach to academic achievement.

Procedures.—The Group Rorschach was administered to two groups of students at San Diego State College selected by faculty members as unusually well adjusted or poorly adjusted to college life. A statement identifying the personality of the "ideal" student was agreed upon from which students were rated. The Rorschach records were scored "blind" and the adjustment ratings were compared with faculty ratings of adjustment, GPA, and ACE scores by use of the chi-square technique. The degree of relationship between the variables was determined from the contingency coefficient when the chi-square revealed a significant association.

Major Findings.—There is no significant relationship between the adjustment ratings obtained from the Inspection-Rorschach and those from faculty ratings. The faculty ratings are strongly associated with academic standing (GPA), while the Rorschach ratings are not. The Inspection-Rorschach, used purely as a quantitative tool for "objectively" evaluating the Group Rorschach, has no validity in measuring adjustment; nor is the obtained measure of adjustment significantly related to academic achievement.

KEETCH, ELOISE MARLENE. A Study of the Motivational, Attitudinal, and Interest Patterns of Students Enrolled in the Academic Year Institute at the University of Utah, 1957-58. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—F. B. Jex.

Problem.—To analyze and compare the results of three instruments of measurement which were administered to 53 male students in the Academic Year Institute on the University of Utah campus in September 1957: the Edwards Personal Preference Schedule, the Strong Vocational Interest Blank, and the Minnesota Teacher Attitude Inventory.

Procedures.—The *t* ratio technique was employed to determine the significance of observed differences in the mean Academic Year Institute scores, and mean scores for various comparison groups. Existing relationships among certain scores obtained by the study group were expressed as Pearson product-moment correlation coefficients.

Major Findings.—(1) Mathematics-science teachers, as viewed by themselves, differ in their needs as compared to the average college male. (2) The Minnesota Teacher Attitude Inventory and the Edwards Personal Preference Schedule do not measure the same phases of personality. (3) The students in the Academic Year Institute have a broad field of interests. (4) The educational philosophy of the students in the Academic Year Institute is more "progressive" than traditional, but it is not as "progressive" as that of the typical secondary school teacher.

KIMBLE, ELSIE B. The Relationship Between Scores on the Henmon-Nelson Test of Mental Ability and the Socioeconomic Status of the Families of 341 Eighth-Grade Pupils, Wayne Junior High School, Wayne Township, N.J. (Master's, 1957, Montclair State Teachers College, Upper Montclair, N.J.)

Director of study.—Orpha M. L. Lutz.

Problem.—To determine the relationship between the socioeconomic status of the families as determined by the Index of Status Characteristics, and the intelligence of the children as measured by the Henmon-Nelson Test of Mental Ability, of 341 eighth-grade pupils in December 1956.

Procedures.—The Henmon-Nelson Test of Mental Ability was administered by teachers to eighth-grade pupils. The Index of Status Characteristics by Warner, Meeker, and Ellis was the rating scale used to determine the socioeconomic status of the families. The characteristics used to determine the socioeconomic level were the occupation of the father, the education of the father, and the dwelling area of the family. Each characteristic was rated on a seven-point scale from high to low. The dwelling areas were appraised by the investigator, using the findings of a real estate specialist. Each of the three characteristics was weighted according to directions given by Warner, Meeker, and Ellis. The relationship between the intelligence of the pupils and the socioeconomic status of their families was determined by calculating the coefficient of correlation.

Major Findings.—The results showed a positive, though not high, relationship between the scores on the Henmon-Nelson Tests of Mental Ability of the children and the socioeconomic status of the families as determined by the Index of Status Characteristics. The median Henmon-Nelson IQ scores were progressively higher with each higher socioeconomic level. There was, however, considerable overlapping of intelligence scores among the various levels of socioeconomic status.

KNAPP, ROBERT RICHARD. Comparison Between Power and Time-Limit Intelli-

gence Test Performance of Mexican and American Subjects. (Master's, 1958, San Diego State College, Calif.)

Director of study.—Robert C. Harrison.

Problem.—To test the hypothesis that the difference between intelligence test scores obtained under speed conditions as opposed to power conditions would be greater for Mexican immigrant subjects than for native-born American subjects.

Procedures.—Two samples of 100 subjects each were obtained, one of adult, male, Mexican-visa applicants, and the other of adult, male, job applicants at Ryan Aeronautical Company. Subjects were given the Cattell Culture Free Intelligence Test. Each cultural sample was divided into two groups.

Major Findings.—Although both the Mexican and American subjects scored higher under power conditions than under speed conditions, the difference was significantly greater for the Mexicans than for the Americans. The greater difference between the speed and power scores of the Mexicans could be attributed more tenably to cultural rather than intellectual difference between the samples, yet a real intellectual difference was revealed. The power-speed order of presentation resulted in significantly higher scores than the speed-power order.

KOLLMAYER, LOUIS A. The Relationship Between Children's Drawings and Certain Other Aspects of Their Development. (Ph. D., 1957, University of Oregon, Portland.)

Director of study.—

Major Findings.—An analysis of the degree to which a child's reading achievement, personal-social adjustment, and intelligence might be reflected in his drawing development.

LASS, LAWRENCE P. The Value of the Anderson Chemistry Test for Predicting Success in College Science Courses. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—F. B. Jex.

Problem.—To determine the value of the Anderson Chemistry Test at Aurora (Nebr.) High School for predicting success in college science.

Procedure.—Basic scholastic data were secured from the high school record for the sample of 84 chemistry students, who had taken the Anderson Chemistry Test in the years 1952 through 1956. A questionnaire sent to the individuals provided the name of the college attended, science course taken, and permission to use the grade earned. The college registrar verified the student's science grade and furnished the grading system for his institution. Means, standard deviations,

Pearson product-moment correlations, and a multiple correlation were computed on the basis of this information.

Major Findings.—(1) When the Anderson Chemistry Test scores were correlated with the first semester college science grades, the relationship was not significant enough to be used by itself for the prediction of college science success, although the results were comparable to the correlations found between science achievements tests and first quarter science grades by other investigators. (2) The best single predictor of success in college science available to the Aurora High School senior was found to be the level of academic performance as indicated in a 4-year high school grade-point average ($r = .586$); (3) The high school grade-point average and Anderson Chemistry Test scores were combined in multiple regression form to predict college science grades ($R = .607$). (4) The least valuable variable for the prediction of college science success was the intelligence quotient. (5) In a further analysis of the data, high school grade-point averages, intelligence quotients, and Anderson Chemistry Test scores constituted a multiple cutoff approach to predicting success in first-semester college science.

A summary of the results indicated that three-fourths of those predicted to succeed in college science were successful, while only one-third of those predicted to fail, succeeded.

LAU, LAWRENCE SECHLER. An Inquiry Into the Relationship of Tested Abilities and Scholastic Achievement. (Undergraduate Thesis, 1957, John Carroll University, University Heights, Ohio.)

Director of study.—Walter S. Nosal.

Problem.—To determine to what degree tested abilities correlate with scholastic achievement for 4 years, and to discover if test ratings are correlated more highly with success in certain major fields of study than in other areas.

Procedures.—The population sampled consisted entirely of 1956 John Carroll University graduates for which American Council on Education Psychological Examination total scores, grade-point averages, and major field of concentration were available. Of the 241 graduates, complete records were available for 142. The graduating class was divided into graduates of social science, natural science, and business administration. The differences between means were tested by t-tests of significance for unmatched groups.

Major Findings.—There was no correlation significantly greater than zero. For major fields of concentration, the correlation was 0.380 with sociology and 0.020 with liberal arts. Other correlations were: history, 0.064; science, 0.079; accounting, 0.058; and business, 0.059. Grade-point average means ranged from 1.51 for sociology to 2.03 for liberal arts. None of the averages were significantly different from each other.

LAWSHAE, DUNCAN ALLEN. A Replication and Extension of an Internal Analysis of the Personal Judgment Scale. (Master's, 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—A replication and extension of the methodological study by J. Dawkins of the Personal Judgment Scale developed by P. Dawkins. The Personal Judgment Scale (PJS) was a 50-word adjectival checklist which followed the Bills pattern but used only positive words. It was given to 2,500 freshmen at the University of Texas in September 1953.

Procedures.—The PJS consists of 50 positive trait words, to which ratings from 1 (Not at All) to 5 (Extremely) must be made in three sets: (1) I Am; (2) How Much Do I Like?; and (3) Ought To Be. Scores derived from the measure are Self-concept (SC), Self-acceptance (SA), Super-ego (SE), and Discrepancy (SE-SC). In the present investigation, conditions were carefully replicated around a sample of 200 for reliability and interest correlations. A further replication was made of an additional 200 for purposes of interest correlations. The principal statistics used included t and F tests, Pearson r, Fisher z, and the Spearman-Brown formula.

Major Findings.—(1) Corrected split-half reliability coefficients for the replicated sample conformed closely to those reported by J. Dawkins. The r's for Self-concept, Self-acceptance, Super-ego, and Self-super Ego Discrepancy were all higher in the replication and above .90. (2) The interrelationships among the various Self-structure ratings continued to be very consistent with those found in the first investigation. (3) Certain composite results suggest the following conclusions: The correlation between SC and both SA and SE was higher for females than for males; the correlation between SC and SA ratings was about .60; the correlation between SC and SE ratings was about .55. SC and D ratings were negatively correlated and the SE rating had much to do with the discrepancies. (4) Results of the J. Dawkins study and this present investigation tend to support the reliability and construct validity of the Personal Judgment Scale.

LEVY, JEROME. Reducing the Language Complexity of the Study of Values: A Revision. (Ph. D., 1956, University of Denver, Colo.)

Director of study.—John F. Conger.

Problem.—(1) To test a modification or revision of the Allport-Vernon Scale of Values in which language facility plays a less important role in determining scores. (2) To demonstrate the congruence of such a revision with the 1951 Revision of the Allport-Vernon Scale.

Procedures.—Subject population consisted of 157 Air Force enlisted men at Lowry Air Force Base. Each was given three tests: The 1951 Allport Revision, the Levy modification, and the Diagnostic Reading Test. Analyses of variance and Pearson "r's" employed.

Major Findings.—(1) The Levy modification represents a parallel form of the 1951 scale for those who possess a vocabulary level adequate to deal with the 1951 scale. (2) The modification likewise represents a more valid form of the Scale of Values for low verbal people.

LEWIS, ROY DEANE. Some Factors Associated With Perseverance in the Field of Education as Measured by the Minnesota Multiphasic Personality Inventory. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—Reed M. Merrill.

Problem.—To determine and describe some characteristics of persons who consider the field of education as a profession (and subsequently persist in that field to various levels of professional advancement) by considering their responses and response patterns on the Minnesota Multiphasic Personality Inventory.

Procedures.—A total of 124 students in a University of Utah introduction-to-education course between January 1, 1953, and June 1, 1953, comprised the sample. They were divided into six groups by sex and by level of perseverance in the field of education. The mean MMPI scores of the groups were compared to determine whether any differences existed. The differences were then described, with recommendations for their interpretation in view of their statistical significance. In addition, the basic profiles of each group were noted and described.

Major Findings.—The most outstanding difference was on the *Mf* scale between male teachers and male nonteachers with a degree in education, the teachers obtaining much higher scores (9.7 scale points) than the nonteachers. The male teachers obtained higher scale scores on the *Ma* scale than did the nonteachers with education degrees, and they also exhibited higher *L* scores than either of the other two male groups. The male nonteachers with degrees in education obtained lower mean scores on the *Pa* and *Sc* scales than did the males who completed the introductory course in education but did not complete the requirements for a degree in education. Females who persevered in the field of education longer obtained higher mean MMPI scores on the *K* scale and the *Pd* scale; i.e., the lowest scores on these two scales were obtained by those who did not complete a degree in education, and the next lowest by those who actively taught for a minimum of 2 years. Female teachers obtained slightly lower scores on the *Hs* scale than those who did not obtain a degree in education. Females

who did not get a degree in education obtained slightly lower scores on the Pa scale than did the female nonteachers with a degree in education.

LINDSAY, FRANCIS C. Evaluation of the Stanford-Binet Tests Administered by Students in Training at Springfield College. (Master's, 1957, Springfield College, Springfield, Mass.)

Directors of study.—Allen R. Kaynor, C. Eugene Morris, and Emery W. Seymour.

Problem.—To determine the validity of Stanford-Binet Tests administered by graduate students in Guidance and Personnel Services as a part of their training program and also as a service to the public schools of Springfield, Mass.

Procedures.—Since the public school officials chose the Otis Tests as criterion measures, these scores and the Binet scores were translated into standard scores for direct comparison. Tests given during the 1954 and 1955 programs to junior high school pupils were examined to determine how closely they related to Otis scores.

Major Findings.—Overall coefficient was .74, considered very high in the light of the criterion (Otis) used. For the first half of testers' experience the r was .50, and for the last half, .80. This higher correlation was verified by plotting both Otis and Binet standard scores for each tester on a graph where tapering off of differences could be visually verified. Overall conclusion was that even the early tests could be accepted by the public school officials, although increased training brought the Binets more in line with the Otises. That this is not necessarily desirable was recognized but was considered extraneous in light of the purposes of the study.

LITTELL, ROBERT T. Differential Characteristics Among Students Graduating From Various Curricular Patterns. (Ed. D., 1957, University of Nebraska, Lincoln.)

Director of study.—Charles O. Neldt.

Problem.—To evaluate the effectiveness of single test scores for advising entering senior high school students in selecting their curricular patterns; and to propose a statistical method for combining scores from several tests into a predictive formula indicating the most appropriate curricular pattern for a student.

Procedures.—Students who successfully completed any one of seven curricular patterns in grades 10, 11, 12 were given battery of tests in grade 10 and analyzed to see which tests differentiated them with respect to curricular patterns.

Major Findings.—Verbal Reasoning, Spelling, and Otis Mental Ability Test scores were the

best discriminations among 12 tests administered.

LOSEE, LENORA LILLIAN. The Prediction of Academic Success From Ninth-Grade Achievement Records. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—F. B. Jex.

Problem.—To investigate the following factors: (1) the relative value of ninth-grade achievement test scores, mental test scores, grade-point average, and chronological age as predictors of first-quarter grade-point average at the University of Utah; (2) the relative value of each of these variables for predicting 4-year high school grade-point average; (3) the optimum combination of these variables for predicting each of these criteria; (4) the implications for the high school guidance program of the kinds of data developed in this study.

Procedures.—This study included 475 students. Correlations were made between the two criteria of University of Utah first-quarter grade-point average and 4-year high school grade-point average with the following variables: (1) scores on the Kuhlmann-Anderson Intelligence Test, (2) total and sub-test scores from the California Achievement Test, (3) grade-point average for the ninth grade, (4) chronological age at the time the achievement test was administered. Multiple correlation coefficients were computed, and from the most promising combination of variables, prediction tables were prepared.

Major Findings.—Prediction of university scholarship can be made from ninth-grade data almost as well as from records obtained at time of entrance to the university.

MACKINTOSH, JAMES PORTER. A Study of the Relationship Between Self-Evaluation and Peer Acceptance During Early Adolescence. (Master's, 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate the relationships between Self-Acceptance, as measured by an experimental adjectival checklist, and Peer-Acceptance. Subjects were students in the 7th, 8th, and 9th grades during the school year of 1956-57. The checklist was adapted from the Personal Judgment Scale developed by P. B. Dawkins.

Procedures.—The 45-item checklist (Self-Evaluation Form) and the sociometric device were administered by home-room teachers late in the school year. Data were recorded and analyzed by sex and grade level for the experimental groups. Principal statistics used were t and f tests, Pearson r , chi square, and Contingency Coefficient. The primary variables were Peer Acceptance, Self-Concept (the I-Am rating), Others-Concept (the Others-Think-I-Am rating), Ideal Concept

(the I-Should-Be rating), the Self-Ideal discrepancy, and the Self-Others discrepancy.

Major Findings.—(1) Sections of the 8th and 9th grades were rather homogeneous in response to the Self-Evaluation Form. Scores of the 7th-graders appeared to be somewhat erratic. (2) Girls tended to rate themselves in a more favorable fashion than did boys at all three grade levels. The tendency was clearest with Others-Concept in the 7th grade. Self-Others discrepancy in the 8th grade, and both Self-Concept and Others-Concept in the 9th grade. (3) In general, 9th graders (especially boys) rated themselves more critically than did those in the two lower grades. (4) Self-Concept ratings were highly related to Other-Concept ratings in all three grades. (5) There were four .10 and higher relationships between Self-Acceptance in the 7th grade, no appreciable chi squares at all in the 8th grade, and .05 and higher relationships in the 9th grade. All pointed toward positive relationship between the two variables. The direct ratings (Self-Concept and Others-Concept) produced all the significant findings, and discrepancy scores appeared to function poorly.

MAIER, MILTON HERBERT. Analysis of a Conformity Scale. (Master's, 1957, Purdue University, Lafayette, Ind.)

Director of study.—Lee E. Isaacson.

Problem.—To analyze a group of items which had been administered as part of Purdue Opinion Poll No. 44, May 1956, to a nationwide sample of 6,000 high school students. The content of the items appeared to be conformity to social groups. The present study drew from the original sample a stratified random sample of 2,000.

Procedures.—Twenty items were subjected to a scale analysis to derive a set of weights for maximum internal consistency. The characteristic roots and vectors were extracted from a joint frequency distribution matrix of item responses. The first set of weights assign a high weight for marking the items and a low weight for not marking. This strongly suggests that an acquiescence set is the dominant characteristic measured by the items. The set of weights from the third vector are in approximately the same direction as the Thurstone weights assigned by a group of judges. Hypothesis related to sex, grade in school, socioeconomic class, authoritarianism scores, musical knowledge scores, musical preferences, musical likes and dislikes, the same as, or different from friends, and church attendance were tested.

Major Findings.—The first set of scores did not differentiate among any of the groups except for the authoritarian scores, and in this case the acquiescence set may be operating in both items. The second set of weights give significantly different scores for all groups except for those who prefer the same type of

music as their friends, versus those who prefer different types. One conclusion is that acquiescence to the printed word and conformity to social groups are not related as measured by these items and tested by these hypotheses. This test is not recommended for use as a measure of social conformity.

MALLETTE, CARRIE H. Relations of Interests to Achievements. (Master's, 1956, Miami University, Oxford, Ohio.)

Director of study.—R. W. Edmiston.

Problem.—To determine any relationships between interest scores and achievement scores in related fields.

Procedures.—Three measures and four fields of interest used with 144 high school seniors. Correlated interests with achievement in related fields.

Major Findings.—Correlations differed for the different measures and were never high although one of significance was found in each of the four fields. The averages did not prove to be valuable.

MARCUS, MURRAY. Behavioral Differences on the Machover Draw-A-Person Test Between Slow and Fast College Learners. (Ph. D., 1956, University of Denver, Colo.)

Director of study.—Harry R. Moore.

Problem.—To locate differential aspects of performance (with particular attention to emotional factors) between slow and fast college readers. (Note that reading ability seems equated with learning ability.)

Procedures.—Machover Draw-A-Person sheets were submitted by 524 University of Denver students. Factor of related intelligences of students ascertained by OSU and DRT tests. Groups of fast and slow readers matched—sex, IQ, etc. Sampling distribution of chi-squares corrected for continuity employed. Five percent level held significant.

Major Findings.—(1) Differences in drawing behavior between fast and slow readers do not seem conclusive but are suggestive of the need for further research in this area. (2) Mean percentages of agreement of the three people used to score the drawings was 83 percent to 84.6 percent, indicating a need for standardized training for scorers. (3) There were sex differences evident in the drawings of the students which, in general, related fairly closely with the observations of Machover, who constructed the standard.

MARQUES, GERTRUDE. An Evaluation of the Mooney Problem Check List for University of Utah Students. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Cecil O. Samuelson.

Problem.—To evaluate the MPCL as a counseling aid for University of Utah students.

There were no norms for this instrument since it was designed to reflect the concerns of students at a given time and setting.

Procedures.—The MPCL was administered to the entire freshman class of 1948. Of the total MPCL's (1,392) that were used, 864 were completed by males and 528 by females. The only criterion for separation into groups was the sex of the subjects. The data were treated as to the frequencies with which the items were marked, the mean numbers of items marked within each area, the differences in item responses between male and female groups, and the responses to the validating questions included with the lists of concerns. The frequencies of item responses were ranked in each area to facilitate the analysis.

Major Findings.—(1) The concerns of University of Utah freshman students were not different from the concerns of freshman students in other colleges. (2) The individual items tended to cluster into categories that related to personality structure. (These clusters formed another dimension of the MPCL that underlay the specific items.) (3) Some definite sex differences were found. (4) Both males and females tended to express about the same concern with physical well-being and with rationalizations about academic deficiencies. (5) There was a notable lack of concern with items relating to religion, morals, sex, and family problems that are directly stated. (6) The content validity of the MPCL, when total groups are considered, was not as high as claimed by the author.

MCKERNON, JAMES GILBERT. The Relationship Between Intelligence and Motor Proficiency in the Intellectually Gifted Child. (Ph. D., 1956. University of Denver, Colo.)

Director of study.—E. Ellis Graham.

Problem.—To determine the relationship between motor proficiency (on the Lincoln Revision of the Oseretsky Tests and Intelligence as measured on the 1937 Stanford-Binet) of children having IQ 130+, between the ages of 9-10 and 10-11-15.

Procedures.—Control group IQ of 90-110. Control and experimental (high IQ) group matched as to sex, socioeconomic factors, etc. Total, N=100 children. Means, medians, t-scores, and correlations between groups employed.

Major Findings.—(1) Gifted children correlate .363 in relation to motor proficiency and intelligence; r for control group was higher. (2) Scores for gifted boy scores were twice as variable as scores for gifted girls, due probably, to earlier maturation of girls. (3) Adding brainpower to a youngster does not always mean a corresponding increase in motor ability. Although the gifted showed greater motor skills than the control group, the increases were not in direct proportions

to IQ's. (4) The relationship statistically is insignificant and unpredictable.

MECHAM, MILTON C. Mathematics Survey. (1958, Weber College, Ogden, Utah.)

Directors of study.—Milton C. Mecham and Robert A. Clarke.

Problem.—To determine whether the Cooperative Mathematics Pre-Tests, given to all students wishing to register in a mathematics class, would indicate the type of mathematics the student could handle successfully.

Procedures.—Names and grades of all students registered in mathematics classes during the 1957-58 school year were obtained; and also the score each student had made on the Cooperative Mathematics Pre-Tests.

Major Findings.—The Cooperative Mathematics Pre-Test is a good indicator of the success that a student may expect in a given mathematics class, and so can be used as a basis for registration in mathematics classes. For example, students scoring between 17 and 22 in the pre-test presumably are qualified to register for Mathematics I or College Algebra. Scores below 17 and scores above 22 would qualify them for other courses.

MILLER, L. H., F. R. PETERS, and D. O. HERMAN. Revision of The Ohio State University Mathematics Placement Test. (1957, The Ohio State University, Columbus.)

Directors of study.—L. H. Miller and F. R. Peters.

Problem.—To revise The Ohio State University Placement Test.

Procedures.—(1) A logical reasoning test was administered to all members of freshman mathematics courses. Scores were punched into IBM cards, together with first-quarter mathematics course grades, and scores on the Ohio State Psychological Examination, on both sections of the present form of the OSU Mathematics Placement Test, and on the OSU English Placement Test. Intercorrelations among these measures were computed for each of the mathematics courses (400, 401, 416, and 421), and for all students, irrespective of the courses in which they were enrolled. (2) The items on the experimental test were analyzed to determine which best discriminated between high and low scores. In developing a new test, several sections, paralleling those used in the experimental test, were constructed, and several were selected for inclusion in the revised Mathematics Placement Test. (3) The items on the currently used Mathematics Placement Test, Form F were analyzed to find which items correlated best with total score. By combining some of the best of these items with some that he had written himself, the project associate from the mathematics department constructed the

arithmetic and algebra sections for the revised placement test.

Major Findings.—Correlation analysis shows that the various tests are not consistent in their usefulness for predicting course grades. Some tests proved better than others as predictors of grades in the four different mathematics course levels. Several advanced problems were included in the algebra section, so that the test could be used for awarding proficiency credit as well as for making student placements.

MILLER, L. H., F. R. PETERS, and D. O. HERMAN. Study of The Ohio State University Mathematics Placement Tests II. (1958, The Ohio State University, Columbus.)

Directors of study.—L. H. Miller and F. R. Peters.

Problem.—To find variables that can be used to predict improvement in mathematics skills following exposure to formal courses.

Procedures.—Three hundred seventy-six freshman students were given form G2 of The Ohio State University mathematics placement test, both before and after taking Mathematics 400 in the autumn quarter 1957. Similarly, 590 freshmen were given form G3 of the placement test both before and after taking Mathematics 401. The difference between the before-and-after scores on the two tests was used as a measure of learning as a result of exposure to the course material. The following information became available on each student: Ohio State Psychological Examination, reading score; Ohio State Psychological Examination, total score; OSU English Placement Test; rank in high school class; before-and-after scores on the OSU Mathematics Placement Test, forms G2 or G3; gain in mathematics skill, or the difference between the two scores.

Major Findings.—Available on request.

MILLER, L. H. and F. R. PETERS. Revision of The Ohio State University Mathematics Placement Tests. (1958, The Ohio State University, Columbus.)

Problem.—To improve the design and validity of the mathematics placement program.

Procedures.—Until the autumn quarter 1957, The Ohio State University mathematics placement tests had consisted of an arithmetic and an algebra examination in a single booklet. All entering freshmen took both parts of this examination, and were then assigned to remedial courses or college-level courses. Beginning with this quarter, however, four separately administered placement tests were used.

G-1, a test of mathematical reasoning, was given to all new students; G-2, a test for students who did not intend to elect mathematics, to those who would be required to take Mathematics 400; G-3 to those who planned to

take college-level mathematics; and G-4 to those who had received proficiency credit in Mathematics 416-421 (the first college-level mathematics courses in the Arts and Engineering curricula, respectively).

At the beginning of the autumn quarter 1958, all entering students took an initial screening examination. Students in the lowest of three score ranges took the preceding year's G-2 test and then placed in Mathematics 400 or 401, while students in a middle range were given a test similar in content to G-3, and were assigned to Mathematics 401 or 416-421. Those scoring extremely high were given a second test (covering college algebra and some trigonometry) and were assigned to Mathematics 416-421, Mathematics 422, or Mathematics 400.

Major Findings.—Available upon request.

MILLER, L. H., F. R. PETERS, and D. O. HERMAN. Study of The Ohio State University Mathematics Placement Tests—I. (1958, The Ohio State University, Columbus.)

Problem.—To determine difficulties and predictive validities of items in some of the subtests of The Ohio State University Mathematics Placement Tests, Form G.

Procedures.—Samples of students in Mathematics 401 and 421 were selected from students who had taken placement examinations in the autumn quarter 1957. These samples were used for item analyses of the mathematics reasoning test, Form G-1, and of the mathematics placement test, Form G-3. Course grades were the standard against which the items were compared. The distribution of answers for all items on the G-4 mathematics examination was determined as a measure of item difficulties.

Major Findings.—The results were used in constructing a new revision of The Ohio State University Mathematics Placement Tests for use in the fall quarter 1958.

MILLS, ROBERT E. An Evaluation of Techniques for the Teaching of Word Recognition. (Ed. D., 1955, University of Florida, Gainesville.)

Director of study.—George D. Spache.

Problem.—To determine the teaching method or combinations of methods most effective in teaching word recognition to various types of children.

Procedures.—Thirty-nine boys and 19 girls, ages 7, 8 and 9, in Pasco County, Fla., were divided into age groups and intelligence groups, low, average, and high, as determined by the Wechsler Intelligence Scale for Children. Samples were given of an author-devised learning methods test for four methods of teaching word recognition—visual, phonetic, kinesthetic, and combination. Corre-

lations and analysis of variance between the variables were made.

Major Findings.—Significances at the 1-percent level were found with intelligence interacting with method, and chronological age with intelligence. Chronological age interacting with method and intelligence as a main effect were found to be significant at the 5-percent level of confidence. Specific findings: (a) low intelligence-phonics method least effective; (b) average intelligence-kinesthetic method least effective; (c) high intelligence—all methods result in learning; (d) 7-year-olds—visual method best, kinesthetic method poorest; (e) 8-year-olds—Kinesthetic method best, phonics method poorest; (f) 9-year-olds—no one method is outstandingly effective or ineffective; (g) no constant relationship between age and readiness in the three ages, except the higher the intelligence, the more readily children learn words. Implications: There is a need to get away from the concept of a best method for teaching all children and to concentrate instead on finding out which method is best for which children.

MOORE, MARY LAWANA. Predicting Twelfth Grade School Marks. (Master's, 1958, Miami University, Oxford, Ohio.)

Director of study.—R. W. Edmiston.

Problem.—Early selection for scholarships.

Procedures.—Correlation of (1) language intelligence, (2) achievement ratio, and (3) 3 years' previous average of school marks with average of senior school marks.

Major Findings.— $R_1(234) = .91$; $n = 164$.

MORGAN, DOMOTHY. Comparative Study: California Reading Tests—Elementary, 1950 Ed., Form BB and 1957 Ed. Form. (1958, Claremont Graduate School, Calif.)

Director of study.—William Michael.

Problem.—To aid the Rialto school district in interpreting results from a new edition of the California Reading Test.

Procedures.—Both old and new forms were administered to the same group—entire 5th-grade population of the Rialto school district—of approximately 400 pupils.

Major Findings.—Among Rialto 5th-graders the new form gives higher scores than the old, as follows: Vocabulary 1.1, grade placement higher; comprehension 0.3, grade placement higher; total G.P. 0.7, grade placement higher. Neither the old nor the new norms are accurate. New norms are so far above national norms that it appears the new test norms are too high.

MURPHY, DANIEL THOMAS. Differences in Certain Nonintellectual Factors Between Two Groups of College Students

of Low Academic Potential. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—Phelon J. Malouf.

Problem.—To examine certain nonintellectual factors, identifiable through analysis of records and test data, which may discriminate between a group of college students with low predicted academic achievement, who seemed to be overachieving academically, and a group of similar students performing as predicted.

Procedures.—This study was limited to a sample of 101 students selected from a group of approximately 300 entering the University of Utah with a predicted grade-point average of 1.50 (D+) or below. Academic performance of the first quarter only was taken into consideration. The information pertaining to personality and interest was restricted to certain data secured from Edwards Personal Preference Schedule, 1954, and Lee-Thorpe Occupational Interest Inventory, Advanced Series, 1943. The biographical data were obtained from the Utah State Department of Public Instruction's Form 104, Uniform Application for Admission to Utah Collegiate Institutions.

Major Findings.—(1) Certain data from the Uniform Application for Admission to Utah Collegiate Institutions seemed to be more descriptive of the group of overachieving students than of the students performing as defined in this study. (2) It is possible to distinguish between the two groups on the basis of certain "nonintellectual" personal variables as measured by the Edwards Personal Preference Schedule. (3) It is not possible to differentiate between the two groups with the types and level of interest variables as measured by the Lee-Thorpe Occupational Interest Inventory.

NAMANI, ABDEL-KADER. Factors Associated With High and Low Correlations Between Individuals' Scores on Two Interest Inventories. (Ph. D., 1958, Cornell University, Ithaca, N.Y.)

Director of study.—A. Gordon Nelson.

Problem.—To determine relationships between certain factors and high or low correlations between the scores of individuals on the Kuder Preference Record (Vocational) and the Strong Vocational Interest Blank for Men.

Procedures.—Detailed statistical analyses of relationships between scores on the two inventories.

Major Findings.—The following factors were most closely related to Kuder-Strong consistency of response on the part of individuals: (1) Realistic choice of vocational objectives; (2) agreement between best-liked subjects in high school and Kuder scores; (3) number of high scores on Kuder areas of interest; (4) magnitude of Kuder Standard Score on Social Service.

NORRELL, GWENDOLYN. A Study of Ambiguity in Nonverbal Tests. (Ed. D., 1957, University of Colorado, Boulder.)

Director of study.—Richard Fox.

Problem.—To investigate the degree to which ambiguity factors in nonverbal tests interfere with the performance of individuals and to explore the use of ambiguity in adding a new dimension to testing.

Procedures.—A nonverbal test composed of figure and picture grouping items which had multiple solutions was used. Three groups were tested: (1) an expert group of 21 chosen from the Board of Examiners and Counseling Center of Michigan State University, (2) 25 superior junior high school students, and (3) 89 unselected junior high school students. Each student was asked to answer the test items, giving reasons for each answer; and to select alternate answers, giving reasons for each. The superior group was interviewed in order to note individual reactions.

Major Findings.—There was wide variation in the number of answers and in the quality of the rationales. Some did not see alternate answers, some saw them with effort; and some saw them readily. Response to ambiguity was not explained by intelligence, but rather seemed to be allied with a personality characteristic, possibly the rigidity-flexibility continuum. Ambiguity factors interfered with the performance of certain individuals in all groups and these groups were aware of the same types of ambiguities in the test items. Some individuals of all groups found it difficult to verbalize reasons for choosing an answer. The directions for grouping items introduced further ambiguity because generally they were structured for grouping principle only, when actually two principles were involved: grouping and combination.

PAYNE, WILLIAM EUGENE. The Errors of Predictivity Inherent in the Lorge-Thorndike Intelligence Tests and Manuals. (Master's, 1950, University of Idaho, Moscow.)

Director of study.—Eugene Gilles.

Problem.—To determine whether or not the Lorge-Thorndike Intelligence Test is suitable for use in Idaho schools.

Procedures.—Complete samples of five schools were obtained under standard conditions of administration. Split-halves reliabilities and standard deviations by test at each level and grade were computed and compared with standard deviations obtained when IQ scores for verbal and nonverbal were averaged.

Major Findings.—There was insufficient reliability at levels 1 and 2 for predictivity. Averaging IQ's obtained on verbal and nonverbal portions restricts standard deviation to a point where usual interpretations are misleading, and shows that administration of tests

by different teachers yields widely differing means. Suggestions include: Improvement of format, further item analysis at levels 1 and 2, and reconsideration and revision of directions in the manual before using it for guidance purposes.

PEARSON, DONALD RAYMOND. A Comparative Study of the Curtis Completion Form. (Master's, 1958, Illinois State Normal University, Normal.)

Director of study.—Stanley S. Marzolf.

Problem.—Are the normative data supplied for the Curtis Completion Form applicable to high school and college students, and to State hospital patients? (A cross-validation study.)

Procedures.—Subjects who did not volunteer and were chosen at random, were 15 boys and 15 girls from 2 high schools, 15 men and 15 women from 2 colleges, and 15 men and 15 women from a State hospital. Responses were scored in the manner prescribed by Curtis and then compared with his norm groups.

Major Findings.—The difference between the normal and psychotic groups in this study was significant at better than the 1-percent level. However, this normal group differed significantly from the standardization normal group, while the difference between this psychotic group and the standardization psychotic group was very nearly significant at the five percent level. The discrepancy between the results and those of the standardization group does not seem to be due to the method of scoring. The discrepancy between the two psychotic groups seems probably due to the difference in their composition. As for the difference between the two normal groups, the only available explanation is the difference in age: the S's in this group were, for the most part, younger than those of the standardization group. This explanation, if correct, suggests that the younger S's have greater anxiety. The Curtis Completion Form can be useful in helping the counselor discover the more seriously disturbed, but it must be used with considerable caution.

PETERS, R. and D. O. HERMAN. Special Report to the College of Engineering Committee on Entrance Requirements. (1957, The Ohio State University, Columbus.)

Director of study.—F. R. Peters.

Problem.—To evaluate the efficiency of the University's psychological and placement examinations in reducing attrition rates and in predicting point-hour ratio.

Procedures.—Using a sample of about 500 students who entered The Ohio State University College of Engineering in 1952, correlations were derived between first quarter point-hour ratios and scores on the algebra and arithmetic sections of the Mathematics Place-

ment Test, the Ohio State Psychological Examination, and English Placement Test.

Major Findings.—The multiple correlation for predicting point-hour ratios from the available test scores was comparable to correlations reported in studies using other predictors in other schools. The efficiency of different cutoff scores for predicting the continuance or noncontinuance of the engineering students was investigated. No one cutoff score is sufficiently accurate for screening students at the freshman level.

PETERS, F. R. and E. W. ROBBINS. Revisions of the English Placement Test. (1958, The Ohio State University, Columbus.)

Problem.—To revise The Ohio State University English Placement Test.

Procedures.—The English department of The Ohio State University constructed an experimental examination to replace the English Placement Test then in use, which tapped the student's knowledge of English usage, vocabulary, punctuation, and spelling. The new form required the student to make corrections in the context of a single unified theme, to make the test task more like the problems encountered by students in the freshman English sequence. A revised form of this examination was given to a sample of students who were enrolled in English 400, 416, and 417 in the fall quarter 1957. Three separate item analyses of the test were carried out: (1) internal consistency, or the relationship between item responses and total test score, carried out separately for two groups, English 400, and English 416 and 417 classes together; (2) correlation with the present English Placement Test, or the relation between item responses and course placement; and (3) predictive validity, or the relationship between item responses and course grades in the student's first course in English.

Major Findings.—The results were used in making final revisions on the new form of the OSU English Placement Test. The new forms were used in the placement program for the autumn quarter 1958.

PETERS, F. R., E. W. ROBBINS, and D. O. HERMAN. Revision of The Ohio State University English Placement Test. (1957, The Ohio State University, Columbus.)

Directors of study.—E. W. Robbins and F. R. Peters.

Problem.—To revise The Ohio State University English Placement Test.

Procedures.—(1) The USAFI Test of General Educational Development (Correctness and Effectiveness of Expression, College Level, Form B) was administered to a sample of approximately 200 freshman English students at The Ohio State University, divided among English

courses 400, 416, and 417. (2) Scores on this test and on the present English Placement Test were correlated with course grades at the end of the first academic quarter. (3) The project associate from the English department constructed a test that in his view filled local needs better than either the present English Placement Test or the USAFI instrument. A revised form of his test was administered to a sample of students in English courses 400, 416, and 417.

Major Findings.—In each of the courses the local English Placement Test in current use correlated somewhat better with course grades than the USAFI Test, but the differences were not large. The high intercorrelations between the two tests and the total scores of the Ohio State Psychological Examination indicated that for the sample chosen, all of the tests measured approximately the same thing. Apparently, however, the Ohio State Psychological Examination and the Local English Placement Test are more similar to each other than to the USAFI Test.

PICKETT, LOUIS M. The General Aptitude Test Battery as a Predictor of College Success. (Master's, 1958, Utah State University of Agriculture and Applied Science, Logan.)

Director of study.—Herber C. Shurp.

Problem.—To determine the value of the GATB as a predictive instrument for general college success and other specific areas. Hypotheses: (1) Positive relationship will be shown between scores and overall grade point average. (2) GATB results on Engineering students at Utah State University will differ significantly from National GATB norms for Engineering students. (3) There will be a significant difference between GATB results of successful Engineering College students and those who discontinue training in the College of Engineering with grade point average of 2.10 or lower. (4) GATB norms can be established at USU in Business Administration Education and Physical Education, using different combinations and cutoff scores. (5) There is a higher positive correlation between GATB scores and the grade point average of all classes taken by individuals.

Procedures.—Names and major subjects were obtained for all students from the State of Utah who were juniors or seniors at USU or who had graduated in 1957 and on whom recorded GATB scores were available. Data were analyzed according to the following procedure: (1) The mean scores were computed for each of the nine aptitudes. (2) The standard deviations were computed for each aptitude. (3) Pearson Product moment correlation coefficients were computed for each aptitude with its criterion.

Major Findings.—The aptitude scores of the GATB show a significant positive correlation with general college success, one exception

being manual dexterity. The test results of Engineering students in this study were lower than national norms for selection purposes. There is a correlation between GATB results and success in the College of Engineering. The use of aptitudes G, V, and N for Business Administration norms is justifiable. The most effective norms for predicting success in Education would have been V, Q, and K. The Q score of GATB is the predominant factor in predicting success in Physical Education. When predicting success, there is no advantage in using the grade-point average of courses only in a chosen field.

PILE, EVERETT NEWMAN. Correlates of Retest Response Reversals on Selected Minnesota Multiphasic Personality Inventory Items. (Master's, 1956, San Diego State College, Calif.)

Director of study.—Hilding B. Carlson.

Problem.—To study some correlates of retest response reversals made to 179 selected items from the MMPI, which was administered four times at yearly intervals to a group of students as they progressed through 4 years of college.

Procedures.—The factors of sex, intelligence, and scholastic achievement were studied. Forty students, 23 men and 17 women, were used. The group was divided into pairs of subgroups: Men vs. Women, High vs. Low ACE, High vs. Low GPA subgroups.

Major Findings.—A significant difference between the mean number of response reversals by the two sexes was noted for only one content category, Political Attitude items. Intelligence, as measured by the ACE, was significantly and positively related to the mean number of total response reversals. High ACE subjects made significantly more response reversals to Marital and Family items and Social items than did low ACE subjects. GPA had no relationship to the mean number of total response reversals made. In only one content category, Sex Attitudes, was there a significant difference between the two subgroups of freshman-to-sophomore and junior-to-senior. Low GPA subjects attained stability more quickly than the High GPA subjects in responding to these items.

PUERTO RICO. Puerto Rican Group Test of Mental Ability. (1958, Office of Evaluation, Department of Education, Hato Rey, P.R.)

Director of study.—Pablo Roca.

Problem.—To construct a test, for use in the public schools of Puerto Rico, that would yield an estimate of the general ability of Puerto Rican children.

Procedures.—Stratified sample of school population according to enrollment, location, and urban and rural zones. Administration of tests to 1,710 subjects from grades 1, 2 and 3, for First Experimental Edition Validation

with Revised Stanford-Binet Scale, Form L, and the Interamerican Cooperative Test, Primary Level. Item analysis, determination of Phi Coefficient for the final selection of items. Second experimental edition, administration of test to 3,484 subjects. Same procedure as foregoing.

Results of study.—A new test was developed, the Prueba Colectiva Puertorriquena de Capacidad Mental, for use in grades 1, 2, and 3. A test manual was prepared and tentative norms are available.

REILLY, J. J. The Development of a Technique To Measure a Component of Critical Thinking in the Physics Area. (Ed. D., 1956, Boston University, Mass.)

Director of study.—William C. Kvaraceus.

Problem.—To investigate critical thinking (defined as a mental skill in applying methods of logical inquiry and reasoning) in the area of physics.

Procedures.—Items in a science scrapbook, consisting of 40 newspaper clippings were matched to 40 corresponding items in the Dunning Physics Text and were administered to the freshman class at Boston University General College (N-293) during a 2-hour period. Performance data on 200 liberal arts freshmen at two other colleges were obtained to clarify the data on the Boston University freshmen. One hundred items were drafted and analyzed for content, vocabulary, and sentence structure. The analysis procedures included the following: (1) item-difficulty values computed on Dunning and scrapbook items, (2) item-discrimination values (Guilford phi) derived on scrapbook items, and (3) number of testees passing and failing each scrapbook item in relation to the comparable Dunning item tabulated and the tetrachoric correlations (r_t) derived for all 40 items. Forty of the 100 items were finally selected as adequate and were submitted to an expert jury for opinion.

Major Findings.—The techniques might be developed into a sensitive instrument for measuring one component of critical thinking. The science scrapbook is not an intelligence test or a reading test; it is unrelated to what is known as spatial relations ability. Science content in the scrapbook was about what had been expected from research to date.

RHEINSTROM, DIANA. The MMPI as Predictor of Subsequent Emotional Problems. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Cecil O. Samuelson.

Problem.—To study the effectiveness of the Minnesota Multiphasic Personality Inventory as a device for determining in advance which of the entering freshmen at the University of Utah were likely to develop problems of an emotional or psychological nature.

Procedures.—The sample was drawn from the individuals who had taken the MMPI in the autumn quarter of 1948. (Application for counseling at the Marriage Counseling Bureau of the university has been used as a criterion for such maladjustment.) The total number was 66; 33 were in the Experimental Group (those who had received counseling at the Marriage Counseling Bureau) and 33 in the Control Group (those who had not received counseling at the Marriage Counseling Bureau). The groups were equated on the following variables: sex, age, place of birth, size of high school from which they graduated, marital status, grade point average in high school, size of high school graduating class, and service records. There were 12 females and 21 males in each group.

Major Findings.—Significant differences do not exist between the Experimental Group and the Control Group in scores on the scales of the MMPI, except for the Schizophrenia (Sc) Scale for males, which was significantly different at the 5-percent level. Both the Experimental Group and the Control Group were well within the normal range on all scales. The MMPI is not an effective predictor of subsequent emotional problems of college students.

RHOADES, BETTY JANE. Relation of Various Factors to School Marks and General Achievement. (Master's, 1957, Miami University, Oxford, Ohio.)

Director of study.—R. W. Edminton.

Problem.—Prediction of school marks and general achievement.

Procedures.—A total of 94 high school seniors were used. The following were measured: School marks, general achievement, general intelligence, how to study, school adjustment, sociometric, attention, total adjustment, achievement ratio and multiple correlation and regression.

Major Findings.— $r_1(84679) = .83$. $r_1(2456) = .78$. $r_2(93) = .98$. General achievement can be predicted satisfactorily. The prediction of school marks might be satisfactory if an achievement ratio were provided, using school mark averages in place of general achievement.

RHODES, HELEN E. Normal Children's Performance on the Grassi Test. (Master's, 1957, Illinois State Normal University, Normal.)

Director of study.—Stanley S. Marzoff.

Problem.—How do the results of the Grassi test administered to 6th-, 7th-, and 8th-grade children compare with those in the older age groups?

Procedures.—The S's were 33 boys and 33 girls, 11 each from each of the three grade levels. Procedures for administration estab-

lished by Grassi were followed and the same manner of scoring responses was used.

Major Findings.—Children in the age ranges used are capable of abstract behavior, but the amount of time required for the shift from simple to complex behavior is greater than the limit presently imposed as indicative of capacity for abstract behavior. With these S's there was improvement in performance with age. Boys did better than girls.

ROOSA, JAN B. Some Aspects in the Relationship of Personality and Intelligence. (Ph.D., 1957, University of Denver, Colo.)

Director of study.—Harry R. Moore.

Problem.—(1) Are there predictable relationships between personality traits and certain kinds of intellectual functioning? (2) What traits are characteristic of the research sample as a whole, of males and females, etc.?

Procedures.—ACE Psychological Test scores correlated with Thematic Apperception Test (TAT). Subjects were 124 D.U. students, ages 19 to 45, 63 male and 61 female, representing extreme ends of scores Q and L on the ACE. Table X² by Edwards (chi squares) used for significance.

Major Findings.—(1) Major proposal (No. 1 above) was supported. (2) However, as a modification of the basic proposal, the variability of some personality traits appears to be a function of a single variable, whereas the variability of other traits appears to be a function of interacting variables.

SAVARD, DAVID ALFRED. Responses on the Application Blank as Predictors of Success in Certain Civil Service Classifications. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Ivan N. McCollom.

Problem.—To determine the effectiveness of application-blank data in predicting employee job success in an area other than that of the sales field. The criterion was that of supervisory ratings, using a ranking method. The hypothesis tested was that certain response items on the application blank would prove effective as predictors of on-the-job success.

Procedures.—The sample consisted of 227 employees in a semi-industrial situation, and 18 response categories were tested for predictive value. Results of the tryout and followup groups for each employee classification were tabulated and compared to determine whether the predictive potential of the tryout group was realized in the followup group. The application blank can be used effectively for employee selection purposes.

Major Findings.—The hypothesis that certain response items on the application blank (Civil Service Form 57) will prove effective as predictors of success on the job as measured by

supervisory ratings is accepted. The technique for determining the predictive value of the response categories is relatively simple: no complex statistical formulas are needed.

SENINGER, ROLLIN A. Development and Evaluation of Visual Aids for Interpreting the Differential Aptitude Tests and Kuder Preference Record. (Master's, 1957, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To develop a set of visual aids for interpretation of the Differential Aptitude Tests and the Kuder Preference Record (Vocational) and to evaluate the effectiveness of these aids when used in the schools.

Procedures.—Visual aids were accompanied by a written protocol which served as a point of departure for counselors. Comparable populations were given group and individual test interpretations with use of the visual aids and with conventional blackboard and verbal methods. Two evaluative forms were used to compare groups. Counselor bias was controlled by rotation across methods. Results were analyzed by *t* and *F* tests.

Major Findings.—(1) Students who received interpretations with use of the visual aids made higher scores than those who had conventional interpretations on both Information and Satisfaction measures, with *t*'s of 1.82 and 2.27, respectively. (2) The responses of subjects who had conventional interpretations were generally more variable than those of subjects with whom the visual aids had been used. (3) Girls tended to make higher scores than boys and to exhibit less variability. (4) Visual aids help hold the content of interpretations fairly constant without necessarily limiting counselor initiative or student participation.

SHAFFER, V. W. and J. BASHAM. A Construct Validation of Adler's Social Interest. (Ph. D., 1958, The Ohio State University, Columbus.)

Director of study.—H. B. Pepinsky.

Problem.—To determine whether social interest, as it might be used in counseling practice, is a valid construct.

Procedures.—(1) A TAT type of test (Social Interest Scale) was developed as a measure of the construct. SIS protocols were obtained from patients on the Exit Service Program at the Veterans' Administration Hospital, Chillicothe, Ohio, and scored for level of social interest. (2) SIS scores were correlated with a series of other measures of social interaction, obtained at three of Leary's levels of measurement of interpersonal data: *Public communication* (patients were rated by nurses, aides, and other patients on items from the Kuhn Patient Behavior Check List and the McReynolds-Ferguson Hospital Adjustment

Scale); *Conscious description*, or the subject's view of himself and of the world (the sociable scale of the Thurstone Temperament Schedule and the outgoing-sociable factor of the Stern Activities Index were used as relevant measures); *Values* (ego ideal), i.e., the subject's picture of how he should or would like to be.

Major Findings.—Little or no correlation between levels was found. Within levels, however, the correlations appeared to be substantial. The findings must be interpreted with caution, but a methodologically important contribution to the problem of construct validation has been made.

SMITH, JEANNE B. Abbreviated Wechsler-Bellevue Scales With a Select High School Population. (Ph. D., 1958, Bradley University, Peoria, Ill.)

Director of study.—Leo G. Bent.

Problem.—To devise abbreviated scales of the Wechsler-Bellevue Intelligence Scale, for use with a select high school population, in order to determine whether a short form might be satisfactory in securing the IQ level of disturbed high school pupils.

Procedures.—Records of the 798 subjects were extracted in consecutive order from active files in the Bureau of Child Study of 88 of Chicago's general high schools. Referring problems were varied. Pupils were examined by a group of certified psychological examiners. The correlation between the full-scale IQ and the sum of the standard scores of the 10 subjects with all possible combinations, a total of 1,022 correlation coefficients, was secured. The square-root method was used to obtain multiple correlations for an increasing number of combinations of subtests.

Major Findings.—The short form (composed of information, similarities, picture arrangement, and block design) had a correlation of .93, with the full-length Wechsler-Bellevue. With the addition of a fifth or a sixth test, the multiple correlation was increased only .01 of an IQ point, which was judged to be an insignificant increase in view of the increased time required for the administration of the longer test. Further study is needed to determine the adequacy of the proposed short form for any other population.

SMITH, RAY B. A Study of the Relationship of Certain Factors to Academic Achievement, and an Analysis of Faculty Grading Habits in the Episcopal Theological Seminary of the Southwest. (Master's, 1957, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate the marking system of a new theological seminary and determine the predictive values of a number of tests and inventories which were used for the se-

lection and counseling of students. The subjects included all students who had attended the Episcopal Theological Seminary of the Southwest in Austin from its founding in 1951 to the close of the 1956-57 session.

Procedures.—Scores made on the following measures were compared with marks: Miller Analogies Test, Diagnostic Reading Test, General Culture Test, the Allport-Vernon-Lindzey Study of Values, the Minnesota Multiphasic Personality Inventory, and the Guilford Inventories of Factors STDCR and GAMIN. Statistical operations involved the use of Pearson r , Chi square and Contingency Coefficient.

Major Findings.—(1) The first-semester grade point average was highly correlated with the total GPA and therefore provided a sound estimate of future academic progress. (2) Four courses (Old Testament, Church History, New Testament, and Theology) constituted the primary basis of academic achievement in the seminary and were powerfully related to total GPA and to each other. (3) The Miller Analogies Test and the Cooperative General Culture Tests (Form YY in one case and A in another) correlated with academic success in the seminary (.51, .64, and .77, respectively, with small samples for the CGCT). (4) Seminary marks could not be predicted with accuracy by scores on the Diagnostic Reading Test. (5) None of the Allport, Guilford, or MMPI scales was significantly related to seminary grade-point averages.

STRATTON, JULIUS A. Nonintellectual Factors Associated With Academic Achievement in an Eighth Grade. (Master's, 1957, Cornell University, Ithaca, N.Y.)

Director of study.—A. Gordon Nelson.

Problem.—To investigate some of the nonintellectual factors associated with academic achievement of a group of 8th-grade students.

Procedures.—Comparison of a group of achievers and nonachievers.

Major Findings.—(1) Girls are more likely than boys to be achievers. (2) Younger students are more often achievers. (3) Students from the better socioeconomic groups were more likely to be in the achieving group. (4) Achievers are better adjusted socially and personally than nonachievers.

STROWBRIDGE, EDWIN D., Jr. An Investigation of the Relationship Between Socio-Economic Status and Academic Achievement. (Master's, 1956, Lewis and Clark College, Portland, Oreg.)

Director of study.—

Problem.—To compare the relation of achievement to intelligence and social-economic status.

Procedures.—Three distinct socioeconomic groups were selected by means of the Sims Score Card. Six groups of children were used in three elementary schools of Portland.

Major Findings.—The correlations with total status were small, but somewhat larger with certain aspects of status.

SUNDSTROM, DALE A. Predicting Academic and Professional Success in Law. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—F. B. Jex.

Problem.—To define some practical criteria for prediction of success in the practice of law through considering the relationship between competency in the practice of law and the generally accepted criteria of scholastic success.

Procedures.—Seventy-eight lawyers (77 men and 1 woman) comprised the sample. A jury of eight lawyers was requested to indicate, for each lawyer with whose professional activities he was acquainted, a rating of "Outstanding," "Average," or "Below Average." Law grade-point ratio was used as the criterion of success. Academic grade-point ratios constituted the principal source of scholastic achievement data. Pearson product-moment correlations were computed.

Major Findings.—(1) The best single predictor of success in the legal profession after graduation was the level of performance on the State Bar Examination ($r=.543$). (2) The best combination of academic variables predictive of professional success after graduation was prelaw grade-point ratio, law grade-point ratio, and the State Bar Examination score ($R=.564$). (3) The best single predictor of success in the College of Law was the first-quarter law grade-point ratio ($r=.709$). (4) The most significant relationship was that between prelaw and first-quarter law grade-point ratios and accumulated law grade-point ratio ($R=.737$). (5) The Ohio State Psychological Examination had no validity as a predictor of either academic or professional success in law. (6) There was no difference between lawyers who had completed the 3-year curriculum and those who had completed the 4-year curriculum at the University of Utah College of Law. (7) The actual number of quarter-hours in prelaw preparation had no relationship to either first-quarter law grade-point ratio or the score on the Utah State Bar Examination.

THOMAS, ROBERT G. The Measuring of Ingenuity and Its Relation to Effective Science Teaching. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—F. B. Jex.

Problem.—To develop a test of science-teacher ingenuity and to determine the relationships

between the ingenuity test scores and available ratings and mental test scores.

Procedures.—A science-teacher ingenuity test was constructed and the results on it correlated with a number of variables.

Major Findings.—The reliability coefficient for the science-teacher ingenuity test was .57 when estimated by the Spearman-Brown formula. The highest relationship discovered was the correlation of .64 between the ingenuity test scores and the Miller Analogies Test, which indicates that these two measures have much in common. Correlation of .57 was found between ingenuity test scores and scores obtained on the Cooperative Biology Test. The ingenuity test scores were compared with scores of tests in general science, mathematics, physical science, and English mechanics. Little was learned from these correlations, except that physical science knowledge appeared to be particularly advantageous for answering the problem of the ingenuity test concerned with rewording a description of fluids. When ratings of attitude towards taking the ingenuity test were correlated with the ingenuity test scores themselves, a significant correlation of .48 was found.

TREMBLAY, CLIFFORD W. Analysis of Tests of Lateral Dominance Administered to One Hundred Students at Montclair State Teachers College, March 1956. (Master's, 1957, Montclair State Teachers College, Upper Montclair, N.J.)

Director of study.—Orpha M. L. Lutz.

Problem.—To develop a short, easily administered test for determination of lateral dominance.

Procedures.—A series of tests was devised, including some techniques previously used by others, and administered to a pilot group and later to a group of 100 students (32 men and 68 women). The time required was approximately 5 minutes. The response of each individual to each of the 11 tests in the series was recorded on a record form. A total index of dominance was computed for each individual.

Major Findings.—A table based on the indices of dominance from extreme right to extreme left dominance was constructed. Correlations seem to indicate a substantial relationship between the total indices of dominance and the results of the timed tests. The Null hypothesis was rejected for 8 of the 21 pairs of tests, tests which yielded results comparable to those obtained by more time-consuming tests in more extensive researches.

WALSTON, ERNEST B. The Autobiography in the Prediction of College Field of Concentration. (Ed. D., 1958, Harvard University, Cambridge, Mass.)

Director of study.—David V. Tiedeman.

Problem.—(1) To examine the possibility that the student autobiography might be analysed to provide a basis for the prediction of college field concentration, and (2) to compare the success rates of prediction based upon autobiographical analysis with those obtained from discriminant analysis of test data from the same students.

Procedures.—Four hundred students of the class of 1951, Boston University College of General Education, comprised the study population. The criteria for their selection were the availability of: (1) their autobiography, (2) their complete test data (19 variables), and (3) knowledge of their actual choice of field of concentration. The predictive design for autobiographical analysis was based upon a modified content analysis procedure. Reference patterns were developed for each of 11 fields of concentration. Three predictions, based on "closeness of fit" between the reference pattern and an autobiography, and ranked in order of level of support, were made from each autobiography. Predictions from test data were obtained through discriminant analysis and the success rates of both procedures were compared. These success rates were determined by comparing the three ranked predictions from each method of analysis with the actual choice and with each other.

Major Findings.—The content (of a self-concept nature) from student autobiographies may be used in the prediction of college field of concentration. The application of the analytical procedures to the autobiographies resulted in a success rate of 62.75 percent of 251 correct predictions out of 400 possibilities. Prediction of field of concentration through discriminant analysis of test scores for the same students resulted in 248 successful predictions. For the study population, the two methods of analysis yielded nearly equal predictive success rates.

WESTFALL, FRANK, W. Selected Variables in the Achievement or Nonachievement of the Academically Talented High School Student. (Ed. D., 1958, University of Southern California, Los Angeles.)

Director of study.—Earl F. Carnes.

Problem.—To attempt to locate screening devices which differentiate high and low achievers among gifted students, and to determine the implications of such differences found.

Procedures.—All 11th- and 12th-grade students of the high schools of a California county were screened for mental ability. The 258 students who met the criteria were ranked in order of grade-point average and the middle 83 percent eliminated. The selected students were studied with regard to value concepts, study habits and attitudes, and educational and occupational levels of parents.

Major Findings.—(1) The SSHA is highly successful in differentiating those students who are achieving satisfactorily in academic activities from those who are not. (2) Educational background of parents has a tremendous influence on the scholastic achievement of their children. (3) The greater the educational attainment of the parents, the stronger the motivation for academic achievement in the child. (4) Students from the lower socioeconomic levels apparently seldom receive strong parental impetus and encouragement for high academic achievement. (5) The non-achiever seems to identify less with his parents, who themselves appear to be less active than parents of achieving students, and less supporting of him and his increased needs. (6) Certain personality correlates are factors influential in determining high scholastic achievement.

WHEALON, JOHN FRANCIS. Intellectual Norms for Admission of Applicants to Borromeo Seminary. (Master's, 1957, John Carroll University, University Heights, Ohio.)

Director of Study.—Walter S. Nosal.

Problem.—To determine intellectual standards for the admission of applicants to Borromeo Seminary by testing the following hypothesis: (1) That the probable success or failure of an applicant may be predicted according to his score on the entrance examinations, and (2) that an applicant is judged more accurately by the sum of his scores on an achievement test and an intelligence test than by his IQ alone.

Procedures.—(1) The records of all minor seminary applicants of the Diocese of Cleveland in 1951-56 were investigated and the results tabulated. (2) The intelligence quotient and the average achievement grade of each applicant were added. (3) The resultant single scores were then set on a continuous scale. (4) Those applicants who subsequently failed in the seminary courses were singled out and their position on the scale noted.

Major Findings.—(1) The practice of testing applicants for a minor seminary and of deferring or refusing admittance to applicants whose scores are below the critical point is justifiable. (2) The system of adding the IQ score and the average grade achievement and judging applicants thereby appears to be valid. (3) The added score (IQ plus average achievement) appears to be a better indicator of future success or failure than the simple IQ. (4) It is safe to admit to Borromeo Seminary an applicant whose added score is 211 or more. (5) It is a risk to admit an applicant whose score is 210 or less, with the risk progressively greater as the score is lower than 210. (6) It is a risk worth assuming to admit an applicant whose score is 210-201. (7) As long as facilities are available, it is a risk

worth assuming to admit an applicant whose score is 200-191.

WHEELER, OSBORNE R. An Investigation of the Relationship Between Parental Occupation and Test Performance. (Ed. D., 1958, University of Southern California, Los Angeles.)

Director of study.—Earl F. Carnes.

Problem.—To investigate the relationship between scores made by a group of high school students (on the Differential Aptitude Tests, Occupational Interest Inventory, and the Iowa Tests of Educational Development) and socioeconomic status of the fathers as measured by the Edwards Scale.

Procedures.—The sample consisted of all senior students during 2 years in a given high school. They were divided into three socioeconomic groups and the distribution of scores for males and females of each of the status groups for each subtest was compared by the use of chi square.

Major Findings.—Virtually no significant differences were found among the status groups of either sex in scores on the interest inventory. On the aptitude and achievement batteries there was a strong tendency for socioeconomic status to be directly related to test performance among the female subjects. Among the male subjects, status differences were much less evident. The upper group excelled the lower in all achievement test scores but the middle group was less frequently superior. On the aptitude battery, the upper and middle groups were superior in only half the tests.

WHITCHURCH, BETTY C. The Significance of Entrance Test Data in Assigning Course Loads for Entering Freshmen. (Master's, 1956, Colorado State University, Fort Collins.)

Director of Study.—Carroll H. Miller.

Problem.—To determine how total scores on the American Council on Education Psychological Examination may be utilized to assign first-quarter course loads to entering freshmen at Colorado State University.

Procedures.—A sample of 200 students was drawn at random from the files of entering freshmen, fall quarter 1954. The total grade-point average for the quarter, ACE score, course load, and grades achieved in any of five course areas taken by the students were recorded. These areas were English, mathematics, chemistry, botany-zoology, and social studies. Since the grade-point average, ACE scores, and course loads were found to correlate positively and significantly, a scatter diagram. Since the grade-point average, ACE score selected as the most obvious critical score was 100. Percentages of students succeeding and deficient were computed for each course area above and below this critical

score. Analysis of the lower-ability group indicated that factors other than intelligence and course load were influencing the amount of achievement.

Major Findings.—Among the five course areas studied, none tends to be a determiner of success or deficiency. The higher ability students can carry any course load attempted, with higher probability of success. The lower ability students in any course area have a lower probability of success.

WIERZICKI, MARY ROSALIA. Relationship Between Reading Abilities and World History Achievement. (Master's, 1957, John Carroll University, University Heights, Ohio.)

Director of study.—Walter S. Nosal.

Problem.—To determine whether the development of specific reading listening skills has helped slower students make significant gains in the attainment of the subject matter in World History class, to give practical suggestions for the classroom, and to stimulate further thinking and experimentation on the topic.

Procedures.—The brighter group was taught traditionally, using discussions, lectures, quizzes, pupil presentations, contests, and reviews. Not much stress was placed on the development of social studies skills. The slower group was taught the same subject matter through development of reading and listening skills. Based on scaled scores, comparisons were made of the two groups: *September*: Group A Reading vs. History; Group B Reading vs. History; *January*: Group A Reading vs. History; Group B Reading vs. History.

Major Findings.—(1) By the time students of average intelligence have reached the 10th grade, their reading proficiency is to a considerable extent specific to the content field in which the reading is done. The slower group, however, has not attained this reading ability. The ability to read historic materials holds unique and different relationships to a number of reading skills. (2) Study of the relationships between reading and study skills and reading proficiency in materials of various content should be a fruitful field for further research.

WIGGINS, NEWTON WAYNE. The Predictive Ability of the ACE Psychological Examination, the Cooperative English Test, and High School Grades in Determining the Scholastic Success of Freshmen at W.I.U. (Master's, 1958, Western Illinois University, Macomb.)

Director of study.—John S. Storey.

Problem.—To determine whether the variables under consideration could predict the

success or lack of success of freshman students at Western Illinois University.

Procedures.—Every other freshman in the 1956 class for whom data were available and who had completed at least one academic year, constituted sample. A multiple regression equation was computed and the predictive value of all variables and each variable determined.

Major Findings.—Multiple correlation with end-of-year freshmen grade-point average was .791. High school grades are considerably more predictive of success in college, as determined by first year grades, than the other variables. All variables, however, show a positive correlation with academic success as defined in the study.

WILCHEK, JUNE G. A Comparison of the Runner Attitude Scale to Teacher Ratings in Identifying Student Leaders. (Master's, 1957, University of Wyoming, Laramie.)

Director of study.—Lyle L. Miller.

Problem.—(1) To compare the Runner Studies in attitude patterns to teacher evaluations of leadership, and (2) to determine whether the Runner instrument could be used in identifying leadership qualities in the high school student.

Procedures.—A teacher evaluation sheet was submitted to a cross section of the faculty at the Norwalk (Ohio) high school for use in evaluating the leadership qualities of 85 members of the 1957 senior class. The Runner instrument was administered to these pupils, and the Runner interpretation was obtained. Comparison of two instruments was made through interfactor correlations, preparation of standards for both leaders and nonleaders, and detailed analysis of the placement of individual cases by both the faculty and the Runner Short Form.

Major Findings.—To a limited extent, the Runner instrument corresponds to the teacher ratings and shows some promise. However, further work is required before the Runner form can be labeled an effective instrument in identifying student leadership qualities and the conformity factor of the Runner Scale. In evaluating students in such areas as leadership, the use of a single question broken down into a five-point scale produces as accurate a result as the use of a more complex form.

WOLFSON, BEATRICE N. A Study of Personality Variables as Measured by Certain Instruments That May Differentiate School Guidance Counselors from Classroom Teachers. (Ph. D., 1958, University of Connecticut, Storrs.)

Director of study.—Edward A. Wicas.

Problem.—To determine whether or not practicing counselors possess certain personality

trait constellations such as a democratic philosophy, emphatic ability, and a nonauthoritarian personality; and to determine whether or not such personality traits do differentiate counselors from classroom teachers.

Procedures.—Four instruments. (Teacher Opinionnaire on Democracy by Ledbetter, The Empathy Test by Kerr and Speroff, a Q-sort on Empathy devised by the investigator, and the F Scale of Authoritarianism by Adorno et al.) were used to measure the personality trait constellations under consideration. The subjects were a sample of 98 counselors and 71 teachers, all employed at the secondary level in Connecticut public schools. All subjects were presented the four instruments, by mail. The data from these instruments were analyzed statistically to compare the two groups of subjects. For 20 pairs of subjects, perfectly matched in the four variables of sex, age, experience, and education, *t* tests were applied to the data from each of the four instruments to determine whether there were significant differences between these two smaller but matched samples. In addition, Pearson's product-moment coefficients of correlation were calculated to determine any degree of relationship between any two of the instruments.

Major Findings.—On the Teacher Opinionnaire on Democracy, the Q-sort on Empathy, and the F Scale of Authoritarianism, the scores favored the counselors. The correlations between these three instruments were significant, although the instruments did not measure identical traits. On the Empathy Test by Kerr and Speroff, the performances of counselors and teachers were quite similar; in addition, this instrument did not correlate with any of the other three instruments indicating it was tapping empathy from quite an unrelated aspect. The counselors in this sample may be more democratic in their attitude and outlook, may be more understanding and emphatic in their dealings with others, and may be more flexible and more permissive in interpersonal relationships.

• WYSONG, EUGENE. Predicting High School Academic Success. (Master's, 1958, Miami University, Oxford, Ohio.)

Director of study.—R. W. Edmiston.

Problem.—To determine the factors of capacity, adjustment, achievement, and interests with highest relationships to school marks in (1) mathematics, (2) science, (3) English, (4) social science, and (5) total school marks.

Procedures.—Scores of verbal capacity, number capacity, social adjustment, self-adjustment, how-to-study, and the appropriate achievement and interest to school marks in the fields considered were correlated in 144 cases. Highest multiples in each case were determined.

Major Findings.—In all cases, the factors which gave significant correlations were

achievement, verbal capacity, number capacity, and how-to-study. Achievement and verbal capacity were most predictive of school marks. Interests, number capacity, and self-adjustment were of minor importance.

Occupations

BENNETT, ROBERT E. An Evaluation of Occupational Literature on the Protestant Ministry. (Master's, 1958, Ohio University, Athens.)

Director of study.—George E. Hill.

Problem.—To present an evaluation of the occupational literature obtained from those Protestant denominations with over 50,000 as reported in the directory of the National Council of Churches, and from commercial publishers of occupational literature. Such evaluation would be of assistance to ministers, teachers, youth workers, counselors and librarians, who select occupational literature and who counsel youth, and to publishers.

Procedures.—The Protestant denominations and all known commercial publishers were approached to secure published materials on the Protestant ministry. One hundred and five pieces were analyzed, using The Ohio University Checklist and Rating Scale for Occupational Literature, an adaption of the N.V.G.A. standards for publishers of occupational literature.

Major Findings.—(1) As compared with the quantity of literature on other occupations, the quantity relating to the Protestant ministry is limited. (2) As judged by the Checklist, the literature analyzed showed omissions of certain aspects of information. (3) Much of the literature did not follow N.V.G.A. publication standards. (4) The author concluded that much of the literature analyzed could not be recommended for guidance. Counselors should not, however, overlook those items meeting N.V.G.A. publication standards.

CLARK, DONALD L. A Survey of the Guidance Program in North Carolina Junior Colleges. (Master's, 1958, Appalachian State Teachers College, Boone N.C.)

Director of study.—William Carse.

Problem.—To study and describe the current guidance practices in the junior colleges of North Carolina in order to provide information concerning these practices for: (1) junior college administrators; (2) students interested in junior college personnel work; (3) faculties involved in training of these students; and (4) any other interested parties.

Procedures.—Questionnaire mailed to all junior college presidents; 100 percent response.

90 percent usable. Statistics, plus percentages of total schools employing various procedures and practices, were given.

Major Findings.—Great variations between programs. Most administrators of guidance programs have other positions; there was no standard meaning of the word "counseling," and a similarity of testing programs was found. It was recommended on basis of results from questionnaire that counselor training needs be more clearly defined. Administrators believe guidance important, but showed little commonness in definition of the term.

CREECH, MARVIN A., and RUTH A. PAGET. Elko Community Occupational Survey. (1958, Division of Vocational Education, Carson City, Nev.)

Director of study.—*_____.*

Problem.—(1) To obtain information about the occupational picture in Elko, Nev.; basic to sound educational planning. (2) To demonstrate the value of such a study in order to stimulate similar projects in other school districts.

Procedures.—A comprehensive study of the entire business community by means of personal interviews. Instruments: interview guide, supplemental form for details about student employment opportunities, and questionnaire for employed senior high school students. Analysis of the survey data and preparation of the final report were the responsibility of the survey directors.

Major Findings.—Job opportunities in Elko are most numerous in the distributive occupations, suggesting need for training in this area, on both high school and adult levels. Guidance service programs should provide the students with information about occupational opportunities and assist them in realistic vocational planning. A comprehensive program of adult education should be planned and a specific staff member assigned the responsibility of promoting and developing short or long-term courses to meet community demands.

EATON, WALLACE B. Pilot Study in Distributive Education of the North Park Business Area. (Master's, 1957, San Diego State College, Calif.)

Director of study.—LeRoy A. Pemberton.

Problem.—To determine whether North Park merchants would be willing to participate in a cooperative distributive education program.

Procedures.—A study of all merchant members of the North Park Business Club, including 174 retail merchants. Ninety-seven responses were obtained from 2 mailings and 20 personal calls.

Major Findings.—Enough retail merchants in North Park were willing to hire high school students on a cooperative basis to insure placements for a large class in cooperative distributive education. Merchants would be

willing, on the whole, to fulfill the requirements for a reimbursable program.

GRANT, BRUCE. The Value of Career Publications Prepared for College Graduates by Manufacturing Companies. (Ed. D., 1956, University of Colorado, Boulder.)

Director of study.—C. W. Fallor.

Problem.—To investigate career publications prepared for college graduates by manufacturing companies in order to determine their value as a source of information to college graduates in choosing a career.

Procedures.—Data were secured from a sample of 170 manufacturing company career publications for college graduates by searching the files of the University of Colorado Placement Bureau. Three sets of criteria were applied to the career publications: (1) Topics of occupational information, (2) quality of information, and (3) quality of the organization of the publication.

Major Findings.—Fifty-two topics of information were found in the career publications, but only 81 percent of these topics were in 50 percent or more of the publications. Of the 27 topics of occupational information, only 8, or 30 percent, were in 50 percent or more. Two, or 25 percent, of the eight criteria of quality of information, were met by 50 percent or more. Two, or 20 percent, of the 10 criteria of quality of the organization of the career publication were met by 50 percent or more of the publications.

Diversification of topics of information is limited. Too many criteria are not met or are subject to limitations. These weaknesses restrict the value of career publications to college graduates. It is recommended that college graduates circumvent the limitations of career publications by using other sources of information when choosing a career.

JOHNSON, HAROLD E. Directory of Vocational Training Facilities in Connecticut. (Master's, 1957, University of Bridgeport, Bridgeport, Conn.)

Director of study.—Roger Richards.

Problem.—To compile a list of all training facilities in Connecticut that accept students for training in preparation towards vocational goals.

Major Findings.—A directory of vocational training facilities in Connecticut, of great help to guidance counselors in the State, was compiled.

KAMMINGA, MARILYN P. Proposed Program for In-School Work Experience at Grossmont High School. (Master's, 1957, San Diego State College, Calif.)

Director of study.—M. L. Crawford.

Problem.—To survey the use of student workers in school offices at Grossmont high school and to study related programs and literature in order to recommend a cooperative in-school work experience program.

Procedures.—Questionnaires surveyed 159 students and 24 supervisors who worked in 17 offices at Grossmont. Literature on work experience was searched to locate current programs and outstanding features of individual plans. Individuals and schools were contacted by letter for details of their programs. Information on the policy of the Grossmont school was secured through conferences with the principal, vice principal, and counselors.

Major Findings.—Over half the California schools offered some type of in-school work experience in 1955. Successful operation of a program depended upon coordination and supervision of related classroom training and the trainee's job experience. At Grossmont high school, running errands was the most common duty performed by students and ability to follow directions was rated most important. Three-fourths of the student-workers were girls. Students were weak in alphabetic filing, penmanship, and spelling.

Objectives of a recommended program of in-school work experience were: (1) provide a learning situation, (2) promote improved public relations, and (3) improve the quality of student service. Workers would be volunteers receiving credit under immediate supervision, students would be released from work to attend related classroom training, and an office pool would be established to handle skilled jobs.

KING, GEORGE G., JR. An Analysis of Existing Occupational Information to Develop Criteria for Occupational Information for Slow-Learning Students. (Master's, 1957, Montclair State Teachers College, Upper Montclair, N.J.)

Director of study.—Orpha M. L. Lutz.

Problem.—To examine the readability of certain existing occupational materials written for slow learners; to compare the readability of these materials with certain comic strip type stories; and to develop criteria suitable for creating occupational information pamphlets in comic strip style for slow-learning students.

Procedures.—The investigation was divided into five parts: (1) a survey of the range of occupational information found in recent occupational information pamphlets; (2) an objective appraisal of the readability of selected occupational information pamphlets written especially for slow-learning students; (3) an objective assessment of the readability of selected educational pamphlets written in comic strip style; (4) an objective appraisal of the readability of selected popular comic strips; and (5) development of criteria

suitable for use in the creation of occupational information pamphlets in comic strip style directed toward slow-learning students. The Flesch readability scale and the Dale-Chall readability formula were used.

Major Findings.—(1) On the basis of readability difficulty analysis, many of the available occupational information pamphlets appear to be too difficult for a majority of junior and senior high school students, and certainly too difficult for slow-learning students, even though some pamphlets have apparently been written for these students. In addition, there is not sufficient variety of materials for these readers. (2) If materials are to be made available for slow learners, they not only have to appear easy to read (such as the comic strip form), but they must also be easy to read (between fourth- and sixth-grade reading level). (3) A good occupational monograph for this group should combine ease of reading, an abundance of illustrative material, and certain essential points of job information; and should be structured towards the masculine-feminine vocational interest patterns of junior and senior high school students.

LEIS, W. W. Occupational Survey of Pasadena: First Phase. (1957, Pasadena Board of Education and Pasadena Chamber of Commerce, Calif.)

Director of study.—W. W. Leis.

Problem.—To supply the schools and the community of Pasadena with up-to-date occupational information.

Procedures.—A questionnaire was carried by psychology students of Pasadena City College to the 218 manufacturers employing 10 or more people. All jobs were classified according to the Dictionary of Occupational Titles and all items on the questionnaire punched on IBM cards. A slightly modified form of the questionnaire was carried by business majors of the college to 341 retail outlets employing four or more people. The complete data were punched on IBM cards.

Major Findings.—The analysis of the data and some of the implications for students in the Pasadena city schools have been published serially in the Occupational Information News Service over a period of several years. Many of these data will not be analyzed and reported until the third and final phase of the survey is completed. Then all jobs will be thrown together and totals in each classification computed. Comparisons of numbers employed in major industrial classifications will also be totaled. Pasadena has changed from a small shop and residential community in the early part of this century to a manufacturing center for precision instruments, electronics, research and development, at mid-century. The 1940 census had recorded fewer than 1,100 factory workers in Pasadena, whereas the 1955 survey found over 17,000.

SABER, MARJORIE JEANNE SHEFFLER. A National Survey of the Dissemination of Occupational Information in the Secondary Schools and a Suggested Outline for Its Use. (Master's, 1957, Iowa State Teachers College, Cedar Falls.)

Director of study.—Wray D. Silvey.

Problem.—To discover what was being done in the United States to disseminate effectively the vast amount of occupational information available to high school youth, and to present practical methods and usable plans for use of this information in school programs.

Procedures.—A letter asking for information about State-recommended practices was sent to the supervisor of occupational services in the department of education in each State. The information furnished was studied to determine the trend of occupational information services to the secondary schools of each State. Further research in books and periodicals dealing with occupational information sought to discover practices being carried on in specific institutions and to expand the study to include suggestions by authorities in the field.

Major Findings.—State departments of education showed increasing awareness of their responsibility for providing the schools with recommendations concerning the dissemination of occupational information. No one best approach was recommended: schools used courses or units, whichever best fit their curricula. Career conferences were growing in popularity and improving in their values to school and community. An outline for the study of occupational information was drawn up. A greatly increased number of certified counselors was a goal, although every teacher should be aware of the occupational implications of his particular discipline. A greater tendency was shown than in the past to utilize student planning, followup studies of alumni, and community resources. School and community were working more closely together than ever before, and the State departments of education were attempting to help knit these forces together for more effective dissemination of occupational information.

SIMMONS, PATRICIA, et al. Occupational Survey of Orange County, Calif. (1958, Orange County Schools, Santa Ana.)

Director of study.—Patricia C. Simmons.

Problem.—To discover business, industry needs, and to counsel and train junior college students to prepare for vocational service in Orange County.

Procedures.—(a) Questionnaire, opinionnaire, interviews, and checking of listed occupations by directories; (b) design: sample of three populations, empirically and by present findings; (c) populations: separated parents,

selected employers, and selected employees; (d) simple statistical analysis.

Major Findings.—The three populations are quite alike. The colleges concerned should sharpen their counselling programs and, to make sure that job skills are being taught, should examine their curricula.

WAHLFELDT, SAMUEL MAX. A Checklist for Evaluating Films on Occupational Information. (Master's, 1957, University of Colorado, Boulder.)

Director of study.—C. W. Fallor.

Problem.—To prepare an evaluation form which would rate more objectively the merits or demerits of any given film on occupations. Available film evaluation instruments were too general for the evaluation of specific film content because they were constructed to evaluate any kind of film.

Procedures.—Checklist patterned after Gertrude Forrester's *Criteria for Judging an Occupational Study*. It was revised and evaluated by experts, three in vocational guidance and five in audiovisual education. Graduate students also added in the evaluation. The checklist was then applied to five films for illustrative purposes.

Major Findings.—Occupational films can be easily and technically evaluated. But evaluation is general and may not give specific insights an individual might want. Evaluation will vary depending on the person who is doing the evaluating.

Personality

ACKLEY, BERNICE C. An Effect of Anxiety on the Perception of Personality Traits of Others. (Master's, 1958, San Diego State College, Calif.)

Director of study.—Virginia Voeks.

Problem.—Experiments concerning the effect of anxiety on perception of personality traits of others suggest that experimentally induced anxiety changes one's perception of others. The present study investigated whether a more permanent "natural" state of anxiety, also, will affect one's perception of others.

Procedures.—Subjects were the Caucasian freshmen and sophomores from 8 general psychology classes (172 males, 128 females). All data remained anonymous. Subjects rated 18 pictures of little-known, "neutral"-appearing individuals on a 9-point scale, from extremely disagreeable to extremely agreeable. Three male and three female pictures of each of the three major racial groups were projected individually for 5 seconds. Subjects were asked which, if any, racial group had

more pictures, and were then given a 78-item anxiety questionnaire to answer.

Major Findings.—Some indication of an inverse relationship was found between anxiety level and total picture rating, using low and high total rating groups only. No relationship was found between anxiety level and total rating for the Mongoloid group, or the Negroid group, in comparison with the Caucasian group. A significantly higher number of subjects said more Mongoloid pictures had been presented than the number who noticed no difference.

ANTENEN, WAYNE W. Personality Characteristics of Superior High School Students. (Master's, 1957, Illinois State Normal University, Normal.)

Director of study.—Stanley S. Marzolf.

Problem.—Do personality differences exist between intellectually superior adolescents and less intellectually endowed adolescents?

Procedures.—Scores on the Verbal Reasoning test of the DAT, a part of the Statewide Testing Program of Illinois, were used as a basis of selection of S's. Thirty out of 38 Juniors and seniors of the university high school who scored above the 80th centile agreed to participate. This group was evenly divided as to sex and rated from 16-0 to 18-0 (mean 17-4). These subjects were given the Heston Personal Adjustment Inventory, the Rhode Sentence Completion Blank and the Haggerty-Olson-Wickman Behavior Rating Scale. Results were compared with available normative data.

Major Findings.—(1) Intellectually superior high school girls expressed a highly significant greater need for Exposition, Organization, and Recognition than did the norm group. They expressed a highly significant less intense need for Dominance and Harm-avoidance. (2) Intellectually superior boys expressed a highly significant greater need for Exhibition, Exposition, Organization, and Recognition than did the norm group. They showed less intense need for Blame-avoidance, Dominance, Harm-avoidance, and Nurturance. (3) Neither boys nor girls showed significant deviation in adjustment adequacy. (4) Ratings were favorable to the superior group.

BRESEE, CLYDE W. Affective Factors Associated With Academic Underachievement in High School Students. (Ph. D., 1956, Cornell University, Ithaca, N.Y.)

Director of study.—A. Gordon Nelson.

Problem.—To discover whether certain aspects of personality are associated with academic underachievement in senior high school students.

Procedures.—Comparison of an experimental and a control group in terms of their responses to six personality inventories of the structured and semistructured type.

Major Findings.—(1) Underachievers manifested significantly more hostility toward persons than did the achievers. (2) Achievers reported feelings of security significantly more often than did the underachievers. (3) The vocational goals of the achievers were more remote and involved more format study than those of the underachievers.

DINKMEYER, DON C. Study of Alderion Child-Guidance Counseling as Measured by Child and Mother Responses to Problem Inventories. (Ph. D., 1958, Michigan State University, East Lansing.)

Director of study.—Buford Steffire.

Problem.—To evaluate changes in mother's empathy for child as a result of Alderion counseling.

Procedures.—The sample was composed of 26 mother-child pairs entering the Alderion child guidance clinic during a 2 month period. Children were ages 7 to 12 and took the Junior Inventory (SRA) and mental health analysis. Mothers took the same instruments and were instructed to respond as they thought the children would. Discrepancy scores were calculated. This procedure was repeated after 5 months of counseling.

Major Findings.—No significant changes in discrepancy. Composite profiles of the children showed change in the direction of better mental health. These changes did not appear to be statistically significant. Parents indicated general satisfaction with the counseling.

ENOBETSON, WILFRED. A Comparative Investigation of the Personality Adjustment of a Group of Teachers As Trainees and as Beginning Teachers. (Master's, 1957, University of Wisconsin, Milwaukee Campus.)

Director of study.—A. A. Reznay.

Problem.—Does a change in personality take place between the student-teaching period and the end of the first year of teaching? Is it possible to predict those who will make inadequate adjustment in the first year of teaching?

Procedures.—Subjects were 25 women students from a Wisconsin county normal school. Tests used: A-B Reaction Study, California Test of Personality, Washburne S-A Inventory, Army-Sorenson Rating Scale for Teachers, Bell Adjustment Inventory.

Major Findings.—For the most part a restructuring in personality takes place. The area showing greatest frequency of maladjustments was self-reliance. Though none of group could be termed "maladjusted" on the inventories administered during student teaching, 10 percent could be so labeled at the end of the first year of teaching. Prediction as to those who would not make adjustment could not be made.

FASSETT, RICHARD. *Personality Characteristics of Leaders in Early Adolescence.* (Master's, 1957, Illinois State Normal University, Normal.)

Director of study.—Stanley S. Marzolf.

Problem.—Are there significant differences in Kuder Personal scores between peer-judged leaders and nonleaders at the junior high school level?

Procedures.—Eighty-two 7th- and 8th-grade pupils were given a questionnaire calling for their judgment of those who among their peers were leaders. Fifteen leaders were matched on the basis of Pintner IQ's with 15 nonleaders. The mean of the leader group was 117.3; of the nonleader group, after matching, the mean was 119.3. The significance of the difference between means and the discriminant function were used to evaluate the data.

Major Findings.—The leaders preferred activity, working with ideas, and directing others. There was virtually no difference in the leaders and nonleaders as to desire to avoid conflict; but the nonleaders showed more preference for stable situations. None of the differences was significant at the 5-percent level, however. By using the discriminant equation, a significant equation could be derived using preference for activity, working with ideas, and directing others. On this basis, all but two of the leaders would have been predicted as such, but five of the nonleaders would have been predicted as leaders.

FLEMING, BETTY LUSK. *A Comparison of Attitudes Between Anglo- and Spanish-American Students as Shown by Two Personality Tests.* (Certificate of Advanced Graduate Study—6th year, 1958, New Mexico Western College, Silver City.)

Director of study.—Gladys Bookman.

Problem.—To determine whether Spanish-American junior and senior high school students were dissatisfied with their home and neighborhood conditions, as had been evidenced by the Mooney Problem Check List given in junior and senior high school health and recreation classes and freshman English classes.

Procedures.—The Mooney Problem Check List and the California Test of Personality were administered to 7th-, 8th-, and 9th-grade Anglo- and Spanish-American children, and comparisons in changes as to attitudes were made from year to year. Each year's changes were compared by graphs. Some hypotheses of cause were discussed in the light of the bad area in which the study was done.

Major Findings.—The Spanish-American high school students definitely did show feelings of

dissatisfaction with their home, family, and community life, but not so definitely feelings of inferiority. Both Anglo- and Spanish-American junior high school students were better adjusted than Anglo- and Spanish-American senior high school students.

HISCOX, E. W., L. KINZER, and R. E. OATES. *An Investigation of the Relationship Between Certain Personality Characteristics and Grade Achievement in the Freshman English Sequence at The Ohio State University.* (Ph. D., 1958, The Ohio State University, Columbus.)

Directors of study.—J. R. Kinzer and F. R. Peters.

Problem.—To investigate (a) the possibility of isolating two personality types within a university setting on the basis of their ideological thinking and beliefs: the S type, or Authoritarian, and the N type, or Non-Authoritarian; and (b) whether the behavior patterns characteristic of the types so isolated are associated with successful performance in a "general college" program. (Hypothesis: Given the same skills in English usage, grammar, punctuation, vocabulary, and sentence structure as measured by the English Placement Test and the OSPE, the N and S types will perform differently in English courses numbered 417 and 418. The behavioral characteristics peculiar to the N's will lead to successful performance as measured by grade achievement. The behavioral characteristics peculiar to S's will lead to unsuccessful performance as measured by grade achievement.)

Procedures.—(1) Stern Activities Index was administered to students in the English 418 course and scored in two ways: to identify the N and S types and to describe the need systems of these types. (2) The difference between the grade actually received in English 417 and 418 and the grade predicted by OSPE and English Placement scores were computed for each student; the N and S groups were compared with respect to this difference. (3) The activities index profiles of individual cases within each type group were studied in an attempt to learn whether behavioral characteristics manifested by the students' need systems are associated with grade achievement.

Major Findings.—Results on file at the OSU Library.

KATZENMEYER, WILLIAM G. *A Study of the Relationship Between a Personality Variable and Academic Performance.* (Master's, 1958, Duke University, Durham, N.C.)

Director of study.—Henry Weitz.

Problem.—To study relationship between academic performance and scores on the Taylor Manifest Anxiety Scale (MAS).

Procedures.—Subjects, 640 Duke undergraduate students. Analysis of Variance (treatment by level design).

Major Findings.—There is a relationship between MAS scores and academic performance, and it varies with ability levels.

MARSDEN, RALPH D. The Authoritarian Personality in the Virtual Focus of Recent Investigation. (Ed. D., 1957, University of Utah, Salt Lake City.)

Director of study.—Norman E. Wallen.

Problem.—To analyze the literature pertaining to the authoritarian personality.

Procedure.—Library research in the recent literature on the topic.

Major Findings.—(1) Much remains to be done before it can be said with any finality that the "authoritarian" has been adequately described or measured. (2) There are circumstances in which a new measure of authoritarianism, and one that is more indirect than the F scale, will be highly desirable, since the value of the F scale diminishes as it becomes familiar to more and more people. A more extended scale would have the additional virtue of being long enough so that adequate equivalent forms might easily be constructed. (3) It still appears that much more research and experimentation is necessary to establish a more accurate measure of the rather broad and nebulous theory embodied in "The Authoritarian Personality" and purportedly measured by the F scale. (4) In several places in the literature the F scale measures not only personality variables but attitudes and opinions as well. (O'Neill and Levinson have conducted a factor analysis of several of the nine subscales developed to measure the F scales' different aspects. Their research shows that the scales are rather a compound of at least three factors: "religious conventionalism" or "seriousness," "authoritarian-submission," and "masculine strength facade.") (5) It is therefore proposed that (a) the F scale be subjected to a more complete analysis, including a formula or design to determine more precisely what is being measured; (b) such studies take into account the expansion in the conception of authoritarianism that has taken place in recent years; and (c) the F scale be extended, since the original form is too brief to serve adequately for consideration in factorial studies and is not fully reliable as a scale for measuring the authoritarian personality.

MICHEL, JOHN. Nonintellectual Dimensions of Performance in Reading. (Ph. D., 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To identify nonintellectual dimensions of functioning personality associated with performance in a training program. The basic proposition was that there would be

significant differences in functioning personality variables before training among post-course improvement, nonimprovement, and attrition performance groups.

Procedures.—Functioning personality was operationally defined in terms of study habits and attitudes (Brown-Holtzman SSHA), manifest needs (Edwards PPS), and modes of reaction to stress (Rozensweig PFT). First-semester male and female freshmen who volunteered for a reading improvement program were the subjects. The major statistic was analysis of variance for unequal N's, with a 3 x 2 design. Analyses were done for the SSHA, the Edwards variables, and the Rozensweig scores. Intragroup and intergroup comparisons for each sex were followed by comparisons between Completers and Non-completers.

Major Findings.—(1) There were no significant differences in study habits and attitudes among the Improvement, Nonimprovement, and Attrition groups. (2) There were significant differences among groups as to certain manifest-need variables. (3) There was a significant difference among the groups as to mode of reaction to stress. Improvers and Nonimprovers did not differ significantly in this case. (4) Distinct patterns of manifest need and mode of reaction to stress were established for the male and female Improver groups. When the mode of reaction to stress deviated, male subjects withdrew from the program as members of the Attrition group. A similar relationship was discovered for the female Performance groups.

PABCHER, ROBERT L. The Self: A Process of Reflected Appraisals. (Master's, 1957, Utah State University of Agriculture and Applied Science, Logan.)

Director of study.—Arden Frandsen.

Problem.—To offer some empirical evidence that the self is truly a process of reflected appraisals.

Procedures.—The subjects were people who reside in Logan. The experimental group consisted of two parts: from the total enrollment of the fifth-grade class at the Whittier School, and from the parents of these children. A "guess who" type inventory was administered to the child to reveal his self-concept. It consisted of 26 word pictures describing sundry personality traits. The parents fill out the same inventory indicating whether their child is described by the word pictures. An item-by-item correlation was used to test the congruence of child appraisal and parent appraisal, and child appraisal and peer-appraisal, which in turn partly tested the hypothesis.

Major Findings.—(1) The individual at the fifth-grade level reflects closely through his self-concept what his peers think of him on these personality traits: social confidence, likes social interaction, popularity, need for peer companionship, having good grades, cre-

ative interest, and likes helping parents. (2) By taking the role of his father, the individual at the fifth-grade level is able to perceive himself the way his father sees him on these personality traits: liking quiet games, feeling lack of confidence, of good appearance, submissiveness, feeling confident with abilities, liking active games, attitude toward good looks, good grades, and creative interest. (3) Applying the role-taking formulation to mother-child relationships, the child's self-concept is a reflection of the mother's appraisals on these personality traits: liking active games, popularity, sex identification, liking quiet games, having social confidence, feelings of good looks, and good grades.

SANDERS, ELLA M. The Relationship between Verbal-Quantitative Ability and Certain Personality and Metabolic Characteristics. (Ph. D., 1958, University of Texas, Austin.)

Director of study.—Oliver H. Brown.

Problem.—To explore personality and biochemical attributes of subjects with large discrepancies in their verbal quantitative abilities as compared to subjects with equal ability in both areas. The study hypothesized significant differences among three groups different from one another in verbal quantitative ability, in various personality characteristics, and biochemical attributes or metabolic patterns.

Procedures.—Scores received by male freshmen on the 1957 University of Texas Admission Test were used to select subjects in three groups matched for the higher of their verbal or quantitative ability scores. Group Vq was composed of subjects with high verbal and low quantitative scores, group vQ of subjects with low verbal and high quantitative scores, and group VQ of individuals with high verbal and high quantitative scores. High scores ranged from the 70th to the 99th percentile; low scores from the 40th to the 8th percentile. Three personality instruments were administered to all subjects: The Edwards Personal Preference Schedule, the Holtzman Ink Blot Test, and the McGuire Q-check. Four overnight urine samples were obtained from each subject during the testing period. Analyses of variance were computed for each of 34 chemical constituents, 15 EPPS scales, and 7 HIT categories. A variance technique developed by McGuire was employed to analyze the Q-check data.

Major Findings.—(1) Certain aspects of the metabolic patterns of the three groups as measured in the investigation differ significantly from one another. (2) Certain personality characteristics of the three groups as measured by the EPPS and Q-check differ significantly from one another. (3) The 7 HIT categories did not differentiate among the three groups.

The significant relationships discovered in the present investigation represent an important challenge for further research in this area. At the present stage of knowledge, however, it would be inappropriate to theorize concretely about the mechanisms by means of which body chemistry, personality, and verbal-quantitative ability are related.

TRESE, LEO J. Personality of the Delinquent Girl. (Ed. D., 1957, Wayne State University, Detroit, Mich.)

Director of study.—Edgar G. Johnston.

Problem.—To present a statistical description of delinquent girls in the light of certain selected factors which are commonly accepted as being influential in the development of personality; and to determine whether the delinquent girl exhibits a negative concept of herself in relation to her human environment, and whether the degree of negativity varies directly with the number of unfavorable personality-influencing factors that have been present in her life.

Procedures.—Subjects were the total population of a semiprivate residential school for delinquent girls. Research tools were interviews and questionnaires. From the questionnaires (checked against case histories) statistical descriptions of subjects were obtained and items compared with corresponding statistics for delinquent boys, as provided by the Gluecks. Personality-influencing factors were assigned numerical scores, and numerical distribution of 101 subjects obtained by means of these scores, with range of scores from 2 to 34, mean of 17, SD of 7.6. A random sample was taken of the interviews from the mean, and from one and two SD's in each direction; and a content analysis was made of these five interviews to determine positive and negative feelings.

Major Findings.—Some notable differences were shown between institutionalized delinquent boys and girls: e.g., higher incidence of broken homes for girls, higher incidence of mothers working outside home, later age of first onset of deviant behavior. Girls exposed to delinquency-producing factors tend to exhibit a preponderance of negative feelings, and girls most heavily loaded with these feelings show a notable preponderance of them as compared to girls least heavily loaded.

TSCHUDY, JAMES JAY. Relationship Between Values and Certain Psychological Variables. (Ph. D., 1958, University of California, Berkeley.)

Director of study.—Lawrence H. Stewart.

Problem.—To get some light on the following questions: (1) Are measures of values, such as those obtained from the Allport-Vernon-Lindzey Study of Values and formulated upon Eduard Sprangers' six basic constructs, useful criteria for the study of personality? That

is, are there actually six personality types which may be differentiated by the use of Spranger's value constructs? (2) Are Spranger's six basic value types all-inclusive, or are there other value classifications consisting of combinations of these types?

Procedures.—By classifying high-ability college students, according to the value scales on which they attained scores at least one probable error above the mean, it was possible to establish groups identified as distinct "value types." These groups, totaling 188 females and 481 males, were distributed over 11 basic and mixed value types for the former, and 7 for the latter. Analyses of variance and chi-square tests were used to determine the extent of group differences with regard to 14 personality scales and vocational interest patterns.

Major Findings.—(1) The partial validation of Spranger's assumption that his value typology is a means of studying personality, as demonstrated by significant personality differences between the theoretical, esthetic, political, and religious value-types. (2) The presentation of evidence that value categories, over and above Spranger's six types, may exist, as demonstrated by the isolation and differentiation of the following mixed value-types: theoretical-religious, theoretical-economic, theoretical-political, religious-esthetic, religious-social, and religious-political. These value-types were found to differ significantly with regard to various personality and vocational interest variables.

Processes

ANGUS, RUTH E. Experimental Study of the Effect of Supervised Study in a Student Government—Controlled Residence Hall of a School of Nursing. (Master's, 1957, The University of Akron, Ohio.)

Director of study.—Mabel M. Riedinger.

Problem.—To show the most effective way of applying faculty supervision and guidance under conditions of an average democratic student government—controlled residence hall; to evaluate the difference in scholastic attainment of student groups under varying experimentally faculty-controlled supervisory and guidance programs.

Procedures.—There were three major steps: (1) The Pre-Nursing and Guidance Battery was administered to the students and the results were tabulated. (2) The student group was separated into two equal composite percentile groups based on the above PNG test. (3) Statistical correlations between the experimental and control groups were then ana-

lyzed to reach any conclusions that could be obtained from the study.

Major Findings.—When an enthusiastic program of guidance and counseling was made available to a student group during a study portion of the day, there was marked improvement in the general academic success of the group.

APPEL, V. H., B. F. BENNETT, H. L. COON, A. W. FOSHAY, R. M. LARSON, H. E. STEVENS, and C. SWALES. A Study in Self-Direction. (The Ohio State University, Columbus.)

Directors of study.—H. L. Coon, A. W. Foshay, and H. B. Pepinsky.

Problem.—To shed light on the following two questions: (1) What is meant by the term "Self-Direction" as used at The Ohio State University School, and (2) How does a group function in attempting to define a vague problem area?

Procedures.—The problem of definition was approached through committee discussions stimulated largely by anecdotal material obtained from observations of a kindergarten class and interpreted subsequently by the kindergarten teacher. Particular emphasis was placed on the role played by the kindergarten teacher in developing student self-direction. The contribution of the physical environment was also stressed. The issue dealing with group function in defining a problem area was studied by examining the committee's efforts over the past year. The minutes of past meetings were used as the primary reference materials.

Major Findings.—Results available upon request.

BALLANTYNE, ROBERT H. A study of Sources of Help Utilized in the Solution of Personal Problems Reported by a Selected Group of Freshmen at the State University of Iowa. (Master's, 1958, State University of Iowa, Iowa City.)

Director of study.—Kenneth B. Hoyt.

Problem.—To determine the incidence of personal problems of a selected group of freshman students at the State University of Iowa and the sources of help for these students in solving their problems. In analyzing the data, attempts were made to answer the following questions: (1) How frequently do freshman students at the State University of Iowa experience certain problems? (2) What sources of help do the freshmen use in solving certain problems? (3) What relationship exists between the types of problems that freshman students have and the solutions for these problems? (Primary interest was directed toward the kinds of sources used.)

Procedures.—A problem checklist was administered to 550 freshmen students. This checklist consisted of 69 problem statements designed to identify problems in five major areas. Twelve possible sources of help were listed, from which the students indicated their source of help, if any.

Major Findings.—A mean of 10.2 problems per student was indicated. No students failed to check at least one problem. Major problem areas fell into the following rank order: (1) academic, (2) personal, (3) vocational, (4) social, (5) home and family. For all problems in all areas, over one-third of the students did not contact anyone for help. The female students displayed a marked tendency to take their problems to someone much more so than the male students. The most frequently used source of assistance turned to by students was their parents.

BUCKLEY, FRANK M. An Evaluation of the Outcome of the Use of Analytic Discussion Method in Working With Teacher Groups. (Ed. D., 1954, Harvard University, Cambridge, Mass.)

Director of study.—Robert B. Sears and Harry Levin.

Problem.—To determine the effectiveness of analytic group discussion method as a means for improving self-awareness in a social situation and thus producing significant modifications in attitude and behavior for teacher and counselors in their professional undertakings.

Procedures.—(1) Major phenomena selected for observation were the attitudes and behavior of the subjects. (2) Premeasures and postmeasures 9 to 10 months apart were employed with an experimental and control group. (3) Procedures and instruments were interview (semistructured), attitude test (MTAI), direction observation of teacher behavior in the classroom, rating scales of attitudes, and behavior analysis of typescript of tape recordings of group persons, and principal's rating.

Major Findings.—(1) A modified form of group therapy may be used successfully with normal professional groups. (2) Group discussion may be a valuable tool in improving work satisfaction and achievement. (3) Major hypothesis confirmed by the findings, namely, that the use of group discussion method by a trained clinical counselor in working with small (10-15) groups of teachers will, under appropriate conditions, produce certain desirable modifications in teacher attitudes and classroom behavior which will differ significantly from those produced by an academic course in the psychology of education. Findings indicated differences between experimental and control groups which were significant in both the statistical and practical sense (beyond the .01 level of confidence on attitudinal and behavior change).

OHANO, T. M. Predicting Selected Behavioral Characteristics on the Basis of Observation of a Group Psychotherapy Session with Mental Patients. (Ph. D., 1957, The Ohio State University, Columbus.)

Director of study.—F. M. Fletcher.

Problem.—To investigate the accuracy of the guesses and impromptu hypotheses that the counselor or psychotherapist spontaneously makes and alters during the course of counseling or psychotherapy. **Hypothesis 1:** Psychologists observing a group psychotherapy session will be able to predict behavioral characteristics and psychiatric symptoms at a statistically significant level, when their responses are correlated with the criterion ratings of nurses, aides, physical medicine, and rehabilitation therapists. **Hypothesis 2:** Psychologists observing a group psychotherapy session will be able to estimate significantly more complex variables as follows: present friendship standing, present leadership standing, and future leadership standing, validated against sociometric measures; level of social activity validated against a time sample of ward activities; and an estimate of length of hospitalization required before being ready for release, validated against hospital records. **Hypothesis 3:** Observing psychologists, on a second observation of the subjects 8 months later, would be able to predict the same items with a significant increase in accuracy.

Procedures.—Psychologists experienced in the therapy and treatment of mental illness observed a group psychotherapy session and individually rated each patient on 21 items. To avoid contamination of prediction due to prior knowledge, the subjects were not known to the observers.

Major Findings.—(1) The chi-square test reveals that hypothesis No. 1 was substantiated beyond the .01 level of significance. The successfully predicted characteristics were general activity level, submissiveness-hostility, depression-manic excitement, withdrawal tendencies, conceptual disorganization, and performance on therapy assignments. (2) Three of the predictions used to verify hypothesis No. 2 were significant, as tested by chi square, beyond the .01 level of significance. The successful predictions were present intelligence, present leadership standing, and estimate of length of hospitalization required before release. (3) Hypothesis No. 3 was rejected. There was a trend toward improvement in accuracy, but not at a statistically significant level.

CLARK, MARGUERITE ANN. Group Guidance as a Method of Attaining Counselor-Counsee Rapport. (Master's, 1957, University of Colorado, Boulder.)

Director of study.—C. W. Fallor.

Problem.—To show the need for a 9th-grade group guidance class, taught by a qualified guidance counselor, to offer needed assistance to all students in understanding self and environment, increase counselor-counsee rapport, and increase the students' understanding of the guidance services.

Procedures.—Review of literature and summary of group guidance programs in 12 schools obtained from handbooks and bulletins.

Major Findings.—Class in group guidance, integrated within the school curriculum for 9th-grade students, is far superior to home-room techniques for orientation to the school and the guidance services and for establishment of counselor-counsee rapport.

EKLUND, GLENN LINDH. An Experimental Study of the Effects of Multiple Counseling Upon a Group of Under-Achieving Seventh-Grade Students. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—Phelon J. Malouf.

Problem.—To determine the effect of multiple counseling upon the scholastic, social, personal, and home adjustment of an experimental group of 7th-grade students.

Procedures.—Measures of the mental capacity, social adjustment, self-adjustment, and scholastic adjustment were secured for all 7th-grade students. Background, test results, and teacher ratings of achievement in the classroom were used in order to select a group of students which could be classified as under-achievers. From these, 16 volunteers were solicited for the experimental group and were matched with a control group for the study. The experimental group worked with the counselor, the writer, in a multiple counseling activity one hour a week for a period of approximately 5½ months in 16 counseling sessions. The control group did not have access to either individual or multiple counseling services.

Major Findings.—(1) The improvement in academic achievement was greater for the students in the experimental group than for the students in the control group. (2) The improvement in social adjustment was greater for the students in the experimental group, as evidenced by higher scores on a social acceptance scale, and scores on a personal adjustment inventory were higher. (3) Indications of improvement in home adjustment were reported by parents for about half of the members of the experimental group. (4) Multiple counseling is an effective technique in helping underachieving junior high school students improve their academic performance. (5) Multiple counseling contributes to improvement in certain other areas of student adjustment. (6) From the standpoint

of feasibility, multiple counseling is practicable within a junior high school setting.

ENGLISH, URNA PETERSON. Group Counseling of Junior High School Students With Certain Adjustment Problems. (Master's, 1958, Iowa State Teachers College, Cedar Falls.)

Director of study.—Robert Adrian.

Problem.—To determine whether group counseling would help resolve adjustment problems of junior high school boys habitually placed in detention for infractions of school rules.

Procedures.—A sampling was taken of boys who were exposed to 13 weekly sessions of nondirective counseling sessions with a similar sampling who did not have the counseling experience. Criteria for measuring the degree of problem resolution were detention records, the SRA Youth Inventory (Form A) and teacher judgments. The subjects were 43 junior high school boys, selected because they had accumulated more than three detention assignments during the first 9-week grading period of the school year.

Major Findings.—(1) Group counseling of junior high school pupils who have adjustment problems accelerates the rate of problem resolution. (2) Time has a positive influence on improvement of adjustment for both counseled and non-counseled groups. (3) Counseling has more merit than detention as a means of disciplining junior high school pupils.

FELDMAN, LEONARD. Multiple Counseling: Factors Related to Improved Self-Knowledge. (Ed. D., 1957, University of California, Berkeley.)

Director of study.—C. P. Froehlich.

Problem.—To obtain information about the multiple counseling process which would help counselors utilize multiple counseling in working with clients and to identify aspects of counselor behavior associated with clients' improved self-knowledge of interests.

Procedures.—Twenty-one groups of high school students, 4 to 6 per group, received short-range counseling, including interpretation of Kuder Preference Record-Vocational. Groups were rated on the basis of counselee's improvement in self-knowledge of his own vocational interest. Most-improved groups were compared with least-improved groups for working relationship, amount of counselor talk, and division of responsibility for progress of the counseling session.

Major Findings.—The sessions of the least-improved groups and most-improved groups did not differ significantly with regard to the working relationship between counselor and counsees and the proportion of the session used by the counselor in talking. Although the mean ratings for division of responsibility were similar for "least" and "most," there

was a significant difference in pattern. In the least-improved groups there was not a consistent pattern of responsibility for directing the progress of the session. In the most-improved groups, all the counselors varied only enough to allow flexibility between sessions; at no time did any one of them significantly deviate from the amount of responsibility he had assumed in previous sessions. This difference in consistency was interpreted to mean that students needed a stable amount of direction when involved in a series of short multiple counseling sessions. The amount of responsibility assumed by the counselor was not as important as the fact that he was consistent.

FLORENCE, E. DEC. I. Motivational Factors in Individual and Group Productivity. II. Validation and Standardization of the Student Behavior Description. (1956, The Ohio State University, Columbus.)

Director of study.—R. J. Wherry.

Problem.—To cross-validate and standardize the Student Behavior Description (SBD) devised by Edwige deC. Florence.

Procedures.—Two samples were used for the cross-validation study: 167 female students at The Ohio State University and 97 male students at Denison University. The criterion used in the validation of the SBD was a nominating technique developed by Florence. The SBD was item-analyzed to provide further information about the item structure of this instrument. The samples used for the standardization of the SBD were 521 male students and 270 female students in The Ohio State University. Percentile norms were developed for each sex.

Major Findings.—The SBD is potentially useful in screening and diagnosing students. The table of norms provides a more realistic interpretation of the SBD scores and yields individual profiles useful for screening and counseling purposes. These norms should be regarded as preliminary, however, pending standardization based upon more extended sampling. Whenever possible, institutions using the SBD should develop local norms.

HATCHETT, NEVA BETH. An Evaluation of the Effectiveness of Pamphlet Material in Educating High School Boys and Girls for Marriage. (Master's, 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate the effect upon attitude toward and information about courtship, marriage, and family life, which resulted from mailing a series of pamphlets to seniors in two high schools and from using the same materials in a group-guidance program in another high school. The nine pamphlets, *Milestones to Marriage*, were prepared by a

group of experts and circulated by the Louisiana Mental Hygiene Society.

Procedures.—In the principal study, the pamphlets were mailed every 2 weeks to high school seniors in Alamo Heights, Tex. An Attitude Scale and an Information Test were developed to cover the content of the pamphlets. These were given in early February and late May 1956 to seniors in Alamo Heights and also to a matching sample in Highland Park, Tex., where the pamphlets were never seen. A similar approach was followed with much smaller groups in less selective high schools in San Antonio, Tex. Results were analyzed by chi square, contingency coefficients, and t-tests based on differences between means and mean differences.

Major Findings.—(1) The content of pamphlets, with a Flesch difficulty level of about at sixth grade, did not permit construction of sufficiently hard attitude and information items for the seniors in the selected districts of Alamo Heights and Highland Park (mean IQ about 115). Scores on the pretest were already high and further gains were difficult to make. (2) Girls tended to make scores superior to those of the boys on both the Attitude and Information measures. (3) The Corrected Contingency Coefficients between Pre-Attitude and Post-Attitude scores were about .60, and between Pre-Information and Post-Information scores about .70. Both Attitude and Information scores were significantly related to IQ and to a measure of social status. (4) Populations were homogeneous on the pretests, while experimental groups tended to have higher scores on the posttests, but findings were neither uniform nor highly significant. (5) *Milestones* seems to produce best results with younger and less selected students and in connection with a group-guidance program.

HENDRICKSON, HAZEL. A Survey of the Problems of Pacolet High School Seniors With Material Used by the Librarian for Helping Them Find Some Solutions. (Master's, 1958, Appalachian State Teachers College, Boone, N.C.)

Director of study.—Ila Taylor Justice.

Problem.—(1) To determine the problems of Pacolet high school seniors as revealed through SRA Youth Inventory; (2) To compare the problems of boys and girls as a basis for guiding them in solving some of their problems; (3) To present materials the librarian has provided and recommended to seniors for gaining insight into their problems; and (4) To propose recommendations for improving the library services to contribute more to the guidance programs.

Procedures.—Results from SRA Youth Inventories, entries in Cumulative Reading Record, interviews with seniors, scores from Iowa Silent Reading Tests. Comparative counts

made for various problem areas, with percentage increases and decreases in problem areas.

Major Findings.—Carefully selected books may contribute to the solution of problems that would be marked on the SRA Youth Inventory. Numerous suggestions are given for helping librarians improve the guidance services of the library.

KING, LOUIS J. Activity Group Therapy With Three Groups of Selected Elementary School Children. (Ed. D., 1958, University of Southern California, Los Angeles.)

Director of study.—Earl F. Carnes.

Problem.—To evaluate the effectiveness of Slavson's Activity Group Therapy on seriously disturbed elementary school children.

Procedures.—A variety of psychometric, sociometric, and case history data was compiled on three groups of six to eight boys, before activity group therapy and after its conclusion. The boys represented different types of behavior deviations, and predictions were made in advance as to the effect the activity would have upon them.

Major Findings.—Seven withdrawn and three aggressive boys showed improvement. Four aggressive boys showed no improvement and only one withdrawn boy could be classified as a failure. Group therapy was believed more successful with the withdrawn than with the aggressive. The area of least improvement was in that of peer-group relations.

KNAPE, CLIFFORD S. The Effect of Certain Chemotherapeutic Agents Upon Vocational Counseling Services in a Neuropsychiatric Setting. (Ph. D., 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To study the variable effects of certain chemotherapeutic drugs upon the reactions of schizophrenic patients in a Veterans' Administration hospital to various phases of testing and vocational counseling. The population consisted of 61 patients in the Waco, Tex., veterans hospital during the winter and spring of 1957.

Procedures.—Evaluations were based upon a Self-Concept device, a Counseling Readiness Rating Scale (CRRS Atomistic and Global), manual dexterity as measured by the Purdue Pegboard, and the Digit Span and Block Design tests of the Wechsler Adult Intelligence Scale. Medication was discontinued on all subjects for 1 month, after which the first evaluations (premedication) were made. Three comparable groups were established. For 3 weeks, one group received Ritalin, one Glutamic Acid, and one a placebo. Then, the second evaluations were taken (midmeasures). The Ritalin and Glutamic Acid groups were

divided as follows: Thorazine, Pacatal, Thorazine-Pacatal, Thorazine-Ritalin, and Pacatal-Glutamic. The placebo group continued as before. Medication was carried on for 1 month, after which the final evaluations (Final) were made. The principal statistics used were the t, F, and Sign tests and chi square.

Major Findings.—The primary findings were: (1) Control and Experimental groups did not differ in terms of background data at the time of the premedication evaluation, or in terms of measures employed at this time. (2) An index of "favorable hygiene" was developed around positive improvement on the several variables from Prephase to Midphase. The Control group demonstrated better hygiene than either the Ritalin or Glutamic and Ritalin groups. The Glutamic group showed better hygiene than the Ritalin group. (3) The hygiene index was also used with scores obtained from the Final evaluation. In general, Thorazine indicated better hygiene than Thorazine-Pacatal and Thorazine-Ritalin. Thorazine-Pacatal was superior to Thorazine-Ritalin, and Glutamic-Pacatal produced most favorable results while Thorazine-Ritalin was least efficacious. (4) The placebo resulted in gains at midphase but could not override real medication effects in the long run, and lessened in influence steadily during the final weeks of the experiment. (5) Thorazine used alone and Glutamic Acid (alone and in combination) appeared generally to be the most effective medications.

LAUFF, RITA J. Methods of Identification and Provisions for Gifted Children in the Schools of Southeastern Ohio and Northwestern West Virginia (The Ohio Valley Guidance Council Area). (Master's, 1957, Ohio University and the Ohio Valley Guidance Council, Athens.)

Director of study.—George E. Hill.

Problem.—This study was the initial step in a long-range plan instituted by the Ohio Valley Guidance Council to encourage better education and guidance for gifted children in its area. Purposes: (1) to discover existing conceptions of school administrators regarding the gifted, (2) to discover existing educational provisions for the gifted, (3) to discover existing special provisions in the schools for education and guidance of the gifted, (4) to develop a plan of action for the Ohio Valley Guidance Council.

Procedures.—A survey of all school administrators in 22 southeastern Ohio and 10 northwestern West Virginia counties.

Major Findings.—(1) Planned programs for the gifted are infrequent in the schools surveyed. (2) School administrators are concerned about the gifted and receptive to ideas for improving their identification and education. (3) A number of schools reported prom-

ling guidance and instructional practices but a serious lack of special service workers (school counselors, school psychologists, and the like). (4) The "gifted" are regarded primarily as children with high IQ's and superior academic achievement. (5) Pilot schools might be identified as centers for observation by teams from interested school staffs. The Ohio Valley Guidance Council might sponsor such visitations. (6) There is need for inservice programs, countywide programs of special classes, countywide guidance programs, and greater awareness of enrichment opportunities through use of community resources.

PAAR, HENRY J., Jr. *Experimental Psychotherapy: Therapists Responses Under Threat and Non-Threat.* (Ph. D., 1967, George Peabody College for Teachers, Nashville, Tenn.)

Director of study.—Julius Seeman.

Problem.—To develop a methodology for the investigation of therapists' behavior: (1) by testing the hypothesis that in a setting of perceived threat therapist responses to client statements would be less effective than responses offered in the absence of threat, and (2) by constructing a scale to measure the effectiveness of therapists' responses.

Procedures.—A total of 26 subjects of 16 psychotherapists responded to statements of clients on specially recorded tapes under threat (by evaluative and authority-figure stimuli) and nonthreat conditions. To determine whether threat was perceived, four physiological measures of tension were obtained from each subject. Verbal responses from the eight possible conditions were evaluated by a scale constructed according to the method of equal-appearing intervals and were tested for significance by a complex analysis of variance.

Major Findings.—(1) The scale has low ambiguity value, covers the continuum of effectiveness, and has seven scale points. Its internal consistency and inter- and intra-judge reliabilities were found acceptable. Tests of validity (face, logical and empirical) indicated it measures what it should. (2) Evaluated by this scale, the verbal responses of 12 of the 26 subjects scored lower under threat than nonthreat. Although this was significant by a sign test, and the physiological measures demonstrated that threat was perceived, the more sensitive analysis of variance test showed no significant differences between conditions. That is, the effectiveness of the subjects' responses remained the same whether obtained under threat or nonthreat.

PAVLIC, W. B. *Motivational Factors in Individual and Group Productivity: IV. The Effects of Personal and Situational Motivation Upon Individual Performance*

in a Small Group Setting. (1956, The Ohio State University, Columbus.)

Director of study.—H. B. Pepinsky.

Problem.—To determine whether situational variables interacting with task performance are related to inferred general drive levels of individual group members. Hypothesis: The experimental motivating conditions will have a greater effect upon the productivity of individuals characterized by low rather than by high drive levels (as inferred from scores on the Taylor Manifest Anxiety Scale).

Procedures.—The design involved the preselection of male subjects of three classes: high, moderate, and low inferred drive level. Each experimental group was comprised of one representative of each class. Twenty groups were run, half under experimental, and half under control conditions. The possible extraneous motivating effects of group interaction during the experimental sessions were controlled. The experimental conditions were designed to increase motivation. The control conditions were designed to provide relatively "neutral" or nonmotivating conditions.

Major Findings.—The hypothesis is not supported by the findings. Neither the inferred drive level nor the interaction of inferred drive level and experimental conditions produces a significant effect upon performance score, adjusted by covariance analysis for initial E-C group practice scores. There is suggestive evidence that the experimental motivating conditions do operate to increase performance ($P=.07$). It is concluded that while the findings do not support the main hypothesis, they are of value in that they do have strong implications for further research in this area, and they do serve to point up certain methodological factors that must be taken into account in further research. In addition, it is felt that the findings may have implications for a theory of productivity.

PEPINSKY, H. B., P. N. PEPINSKY, and W. B. PAVLIK. *Motivational Factors in Individual and Group Productivity: I. Successful Task Accomplishment as Related to Task-Relevant Personal Beliefs.* (1956, The Ohio State University, Columbus.)

Directors of study.—H. B. Pepinsky and P. N. Pepinsky.

Problem.—To test the hypothesis: That four classes of subjects initially differentiated as to their beliefs about themselves would also be characteristically differentiated, in their performance of two group tasks, to which such personal beliefs were relevant.

Procedures.—One task was designed to be relevant to the behavior described by the items comprising the Academic Success factor of Florence's Student Behavior Description (SBD), and the other to the Organizational

Leadership factor. Subjects were selected from the high-low quadrants of scores on these two factors of this instrument. Half the subjects from each quadrant had made high "general level of success" scores on Part II of the SBD, and the other half had made low scores. Each of the 14 four-man experimental groups was composed of one representative of each of the four classes of subjects thus selected.

Major Findings.—(1) Id performance on an "Organisational Leadership" task, the results were generally consistent with the hypothesis. (2) Although differences appear in the predicted direction on an "Academic Success" task, performance is not significantly associated with the task-relevant beliefs of the subjects. (3) The academic task was too highly structured to permit discriminable response variability. (4) The values attached by the subculture to particular kinds of achievement are suggested as motivational factors that interact with personal beliefs to affect performance on different tasks. (5) The order of presentation of tasks may itself be a motivating factor in group task performance. (6) A provisional conceptual statement about the motivational effects upon productivity of task characteristics and personal beliefs is presented, and the experimental results are interpreted with reference to this "microtheory."

PEPINSKY, P. N., H. E. PEPINSKY, S. S. ROBIN, and F. J. MINOR. Motivational Factors in Individual and Group Productivity: V. The Effects of Induced Orientation and Type of Task Upon Group Performance and Group Member Morale. (1958, The Ohio State University, Columbus.)

Directors of study.—H. B. Pepinsky and P. N. Pepinsky.

Problem.—To test the central hypothesis that: Group productivity will be higher when the requirements of the assigned task are compatible with the group's value orientation than when the assigned task and the group's orientation make conflicting demands upon the group members. Subsidiary hypotheses pertain to predictions about whether particular indices of group member morale will be significantly associated with group task performance when systematic variations occur in types of task and orientation.

Procedures.—The experimental design specified that 24 four-man groups each perform two tasks: (1) a Treaty Problem which required for success a maximum of consideration of the interest of others and a minimum of individual skill and competence; (2) a Quiz Problem, which required for success a maximum of consideration of others. An attempt was made to induce experimentally, in systematically varied order, one of two

group value-orientations (adapted from Olmstead, N. S., "Orientation and Role in the Small Group," *Amer. Sociol. Rev.*, 1954, 19, 741-751). Of the total number of groups, eight were used as control groups without any experimentally induced orientation. The postsession questionnaire included items designed to measure (a) attitude toward the task, and (b) satisfaction with the group, viewed as separate indices of "morale." Group productivity, the major dependent variable, was measured by objectively determined group performance scores. The hypothesis was tested by statistical comparisons of the performance measures made under the different experimental conditions and by testing the association between these measures and the two morale indices.

Major Findings.—In general, the results are congruent with the central hypothesis. There is partial support for subsidiary hypotheses pertaining to the relationships of task performance to (a) attitudes toward the task and (b) satisfaction with the group, viewed as separate indices of "morale." Comparisons of the performance of the experimental and control groups clarified results obtained under the two conditions.

PEPINSKY, H. B., P. N. PEPINSKY, and W. B. PAVLIK. Motivational Factors in Individual and Group Productivity: III. The Effects of Task Complexity and Time Pressure Upon Team Productivity. (1956, The Ohio State University, Columbus.)

Directors of study.—H. P. Pepinsky and P. N. Pepinsky.

Problem.—To test under experiment the major hypotheses that (1) productivity (as measured by number of operations performed) on the simpler task will be highest under high time pressure; and (2) on the more complex task, will be highest under medium time pressure, based upon a provisional theoretical scheme and involving the following predictions: (a) There will be a significant interaction between team productivity on an assembly task, presented at two levels of complexity, and time pressure, established at three levels; (b) team productivity on the simpler of the two assembly tasks will be highest under high time pressure, but on the more complex task will be highest under medium time pressure.

Procedures.—Twenty-four practiced 3-man teams performed on the more complex and on the simpler tasks under time conditions manipulated by variations in the frequency of interspersed announcements of the amount of time remaining in the work session. The experimental conditions were systematically varied in accordance with a counterbalanced factorial design permitting separate tests of the effects of task order and time sequence,

and of one complete replication of all the experimental conditions.

Major Findings.—The hypotheses are not supported by the findings. The major portion of the variance in the productivity measures (total numbers of operations performed by each team in each session) is attributable to task complexity and task order, rather than to the time conditions. There is not significant interaction between the task and time variables. Certain trends within sessions and from one session to the next suggest, however, that, over a period of time, differences in imposed time pressure may contribute systematically to differences in productivity or output rate. Time pressure alone is not enough, however, to produce significant differences in team productivity.

ROLLINS, KENNETH W. The Adolescent Peer Group and School Achievement. (Ed. D., 1957, Harvard University, Cambridge, Mass.)

Director of study.—David V. Tiedeman.

Problem.—To study an aspect of peer-group influence which might affect school achievement, and might suggest counseling or group procedures.

Procedures.—(1) Sociogram for peer-group determination within a junior class, limited to boys. (2) Questionnaire for ascertaining attitudes toward school. (3) School records for test results on mental abilities. (4) School records for achievement grades. (5) Analysis of variance and covariance for significant differences between groups.

Major Findings.—(1) No significant differences in achievement between groups, when controlling for mental ability. (2) Significant relationships between peer groups and intelligence for groups of six to nine in number. (3) No significant differences in attitudes toward school. (4) Apparently individual students are not controlled in their attitudes toward school or their achievement in school by their normal social grouping, contrary to many observations of teachers and others.

SONNALTER, JOHN F. The Pupil-Teacher-Administrator Relations. (Master's, 1957, Pacific University, Forest Grove, Oreg.)

Director of study.—M. O. Skarsten.

Summary.—A case study of an 8th-grade boy who throughout his entire school life had displayed a pattern of nonconformity manifested most strongly by refusal to complete any written assignments and an inability to mingle successfully with his peers. In grade 8 a concerted effort was made by the school personnel to help this boy recognize and solve his problems. Conferences between the pupil and parents, teachers, school administrators, and a psychologist were held along with extensive

testing. A program of therapy was administered, with a fair degree of success, giving rise to the hope that the child's adjustment not only to school but to life might successfully be made through following certain recommendations.

STEARNS, GEORGE WENDELL. Evaluation of the Terminal Interview as a Means of Assessing Graduating Students. (Ed. D., 1957, Harvard University, Cambridge, Mass.)

Problem.—To assess by the "Terminal Interview," a qualitative interview technique, (1) the school by its graduating students, and (2) the students as the products of the school. In this evaluative study this technique is compared to other data gathering techniques. A formulation and criteria for the Terminal Interview are set forth.

Procedures.—The study was conducted in a suburban Boston high school using the entire senior enrollment in the commercial curriculum as a population ($N=120$). One-third were interviewed (recorded) and all were asked to complete a questionnaire covering similar topics. Teachers and administrators were also polled for comparative data.

Major Findings.—The Terminal Interview technique formulation, criteria, and methodology were outlined. While the questionnaire proved best for quantitative data, the interview was superior for qualitative and interpretative data. The interview was shown to be better than teacher opinion and prediction for the purposes of assessment.

THOMPSON, JACK and CARMES FINLEY. An Evaluation of the Case Conference Method. (July 1950, Sonoma County Schools, Calif.)

Problem.—To evaluate the effectiveness of the case conference method.

Procedures.—Thirty-five teachers who participated in a case conference composed of administrator, teacher, elementary consultant, guidance consultant. Personal interview by structured questionnaire.

Major Findings.—Case conference (1) far more effective with report; (2) helps teacher better understand the child; (3) most helpful with emotional problems; (4) need for followup conferences; (5) need for more specific helps; (6) participants in case conference should be teacher, administrator, elementary consultant, and guidance consultant.

WHITLOCK, ESTHER. Pilot Study: Multiple Counseling. (May 1958, Fresno City Schools, Fresno, Calif.)

Problem.—To offer a limited number of girls and boys an opportunity for free discussion in human relations, personal and social problems,

etc., and to provide learning focused on personal growth.

Procedures.—Initiate group climate characterized by permissiveness. Participants: Limited to 12, mixed group. Selection of participants: Students chosen and invited according to commonality of problem. Objective measurement: Bell Inventory given in December and May. California Test of Mental Maturity IQ's were equivalent for each student.

Major Findings.—Both objective and subjective measurements indicated a change toward better adjustment in all but one case. Bell Adjustment Inventory Scores for each participant were charted on a graph which compared the December and May results of the inventory. The most significant changes in the total group involved the last two dimensions of the inventory—namely, social and emotional. In every case, where the child became better adjusted emotionally, the social scale score tended to shift. In some cases where the client had been "very retiring," the change was in the direction of becoming more aggressive. On the other hand, a few whose original scores were "very aggressive," moved toward the average. The graphs pointed out one significant fact: the response pattern of each individual remained quite constant; all modifications of personality were in degree rather than in kind. In other words, the general pattern was repeated, but showed variation. Faculty judgment tended to agree with objective results.

WILSON, ULREY K. A Conceptual Framework of Guidance Developed From a Study of Selected Literature. (Ed. D., 1958, Florida State University, Tallahassee.)

Director of study.—H. F. Cottingham.

Problem.—To construct from a critique of the guidance literature from an integrated concept of guidance as a process provided chiefly for students of secondary schools and colleges; to use this conceptual framework to suggest an evaluating technique for current guidance practices in the schools.

Procedures.—This study did not involve statistical experimental design. Through a review of the literature the following were discussed: (1) The background of guidance today, (2) some areas of stress extant, (3) a concept of guidance derived from a synthesis of influencing factors, (4) a suggested conceptual framework for guidance theory, and (5) the development and application of an evaluative instrument.

Major Findings.—Guidance is a configuration of practices by trained personnel dedicated to the advancement of personalized education, which to be effective should: (1) occur with much the same affective content in the overlapping phenomenal fields of the person and the guidance worker; (2) encourage the per-

son to grow in ability to restructure the field for new percepts of himself, society, and the interrelationships of the two; (3) allow the person the freedom to so restructure; (4) encourage the person to take the responsibility for this reorganization; and (5) utilize all available services and resource people to help the person realize that the necessity for reorganization is continuous, developmental, and possible.

WRIGHT, E. WAYNE. A comparison of Individual and Multiple Counseling in the Dissemination and Interpretation of Test Data. (Ed. D., 1957, University of California, Berkeley.)

Director of study.—Clifford P. Froehlich.

Problem.—To investigate (1) the relative effectiveness of individual and multiple (group) counseling, (2) some benefits of counseling versus no counseling, and (3) the relationship of certain variables to improvement in counseling.

Procedures.—The value of counseling and the relative effectiveness of individual and multiple counseling were determined by comparing counseled with noncounseled students and individually counseled with multiple counseled students, in terms of pre- and post-counseling measures on several criteria. The investigation of factors related to improvement in counseling was made by comparing students who improved most on postcounseling criteria measures over precounseling criteria measures with students who improved least on the postcounseling measures. The latter comparisons were made in terms of 13 personal and background variables.

Major Findings.—(1) No significant differences existed among the three study groups on any of the study criteria or on factors of sex, age, intelligence, or high school grade-point average. (2) With few exceptions, both counseled groups showed significant within group gains on postcounseling criteria measures over precounseling. (3) In general, both counseled groups showed significant improvement over the noncounseled group on the post-counseling criteria measures. (4) Very few postcounseling differences of any significance were found between the individually-counseled and the multiple-counseled groups. (5) Students who improved most in self-rating accuracy had higher aptitude scores and a higher grade-point average than students who improved least on the self-rating criterion. (6) No other differences were found between most improved and least improved students.

(7) Test interpretation counseling contributes significantly to improved counsee learning. Counseled students show significant improvement over non-counseled students in terms of increased knowledge of self and test data relevant to improved educational and vocational planning. (8) There is no appreciable difference in the effectiveness of

individual and multiple counseling as defined by the criteria of this study. (9) The factor of intelligence appears to be related to improvement in self-rating accuracy after counseling.

YOUNG, JOHN E. An Intensive Study in One School District To Identify Gifted Children and To Evaluate Methods for Their Identification. (Master's, 1957, Ohio University and Ohio Valley Guidance Council, Athens.)

Director of study.—George E. Hill.

Problem.—(1) To ascertain the incidence of gifted children in one school district and to estimate the incidence in southeastern Ohio; (2) to evaluate teachers' methods for identifying gifted children to determine whether those methods might be improved; (3) to compare the children identified as gifted with the general school population; (4) to provide the Ohio Valley Guidance Council with data useful in its program of guidance and instruction for the gifted.

Procedures.—The entire pupil population of a district enrolling over 500 pupils was studied through past achievement marks, IQ's in school records, and teacher judgments. One hundred and fifty were selected and tested by a battery of achievement and school ability tests. Three criteria were used to select the final group: past marks, tested achievement, and ability, and teacher recommendations. These three methods were compared.

Major Findings.—(1) There is no single criterion for selecting the gifted. Two or three criteria achieve more reliable selections. (2) Predicting giftedness from a single IQ is unwarranted. (3) The incidence of the gifted in the district studied is lower than the general average, probably because of its low socioeconomic status. (4) The gifted of this school district differed from the total school population in ways similar to those revealed by other studies of the same type as the present study.

Professional Preparation

ABELES, NORMAN. A Study of the Characteristics of Counselor-Trainees. (Ph. D., 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To identify some measurable characteristics of counselor-trainees and to suggest some implications for their selection.

Procedures.—Subjects were 130 men and women in the University of Texas graduate school who had completed the Practice Coun-

selling course between 1950 and 1953. A wide variety of test scores was gathered, including the Miller Analogies Test, the Differential Aptitude Tests, the USES General Aptitude Test Battery, the Diagnostic Reading Test, the Cooperative Reading Test, C2, the Minnesota Multiphasic Personality Inventory, the Guilford-Martin Inventories of Factors STDCR, GAMIN, and OAgCo, and the Allport-Vernon-Lindzey Study of Values. Test-score patterns of trainees were determined and compared with those of normative populations. A global rating of promise in counseling was developed by two supervisors and used to categorize more and less promising men and women. Principal statistics were Pearson *r*, Fisher *z*, and *t* and *F* tests.

Major Findings.—(1) As a group, the counselor-trainees exhibited some sharply distinctive patterns in scores. In scholastic aptitude, they were superior to the average graduate student at the University of Texas. The pattern was marked by high K score, high Mf for males and low Si scores on the MMPI; by generally gregarious and highly favorable scores on the Guilford scales; and by elevated scores on the Theoretical, Social, and Religious values of the Study of Values. (2) The pooled rating of the supervisors was found to be a usable, realistic criterion and was given considerable support by external validation. (3) Intellectual factors did not differentiate between more and less promising male trainees, but they did differentiate between the two female groups. (4) Personal characteristics tended to differentiate between more and less promising male trainees, but these operated far less sharply in the case of female trainees. (5) Among the sharpest differentiators between more and less promising trainees were the O, Ag, and Co scores of the Personnel Inventory (highly rated students had more favorable scores), and the L score of the MMPI (highly rated students had lower scores, suggesting greater personal frankness).

BALOUGH, THEODORE W. A Program of Inservice Training for Education Services Personnel in the Continental Air Command. (Ed. D., 1958, Rutgers, The State University, New Brunswick, N.J.)

Director of study.—William H. Atkins.

Problem.—(1) To examine critically the Education Services Program in the Continental Air Command to determine appropriate content for an inservice training program; (2) to examine the policies and investigate the practices of the 17 major air commands in the United States Air Force concerning inservice training for personnel in the Education Services Program; and (3) to propose recommendations relative to inservice training program.

Procedures.—Normative survey.

Major Findings.—With increasing emphasis on qualifications of school personnel, greater at-

tention is given to preservice preparation and its importance. The special role of inservice training is that it must compensate for the lack of any previous training, make adaptations to job situations, and provide for current knowledge and approved practices. Two important developing fields of guidance and inservice training apply to education in general in the United States and to the Education Services Program. The major air commands affirmed the counseling function as most significant of the basic guidance services, and the need for inservice training in the commands.

Two major problems in the Education Services Program pertain to command support and qualified personnel. The Continental Air Command, the Headquarters United States Air Force, and the major air commands can help meet the challenges these problems present by the utilization of the recommendations as set forth herein.

Recommendations.—(1) That the Continental Air Command consider the 27 inservice activities and the 79 subjects (as developed in the study) for the content of an inservice training program. (Principles relative to the establishment of such a program, the publication of a directive and a special training course for supervisors were also proposed. In addition, consideration was given to the matter of evaluations.) (2) That Headquarters United States Air Force and the major air commands accept responsibility for inservice training, establish special courses for supervisors on inservice training responsibilities, appoint committees on inservice training and command support, and emphasize the role of guidance services.

GILLIAM, BERNARD JOSEPH. The Preparation, Adequacy, and Performance in Guidance of Beginning Teachers in Washington, D.C. (Ed. D., 1957.)

Director of study.—A. M. Wellington.

Problem.—To evaluate the guidance performance of graduates of the public-school teachers colleges of Washington, D.C., who were finishing their first or second year of professional teaching in the District of Columbia public schools. The relationships between undergraduate preparation, felt-adequacy to meet guidance problems, and performance of guidance services were investigated.

Procedures.—The 1954 and 1955 graduates of Wilson and Miner Teachers Colleges were surveyed by questionnaire to determine their preparation, felt-adequacy, and performance in rendering guidance services to meet children's problems. Six guidance areas were defined for the survey: philosophy of guidance, statistical measurement and interpretation of tests and measurements, counseling information, individual differences, and counseling techniques. Statistical comparisons were made among areas to determine significant differences indicating relative strengths and weaknesses. Cor-

relations were derived to indicate relationships among the characteristics of preparation, felt-adequacy, and performance.

Major Findings.—(1) Beginning teachers indicate feelings of greatest adequacy in the areas of individual differences and tests and measurements; and of lack of adequacy in counseling information and statistics. (2) Beginning teachers are best prepared in the areas of individual differences and philosophy of guidance, and least prepared in the area of counseling information. (3) Performance of guidance functions is highest in philosophy of guidance and individual differences, and significantly lower in the four other guidance areas. (4) The preparation of beginning teachers is very closely related to their feeling of adequacy. Felt-adequacy, in turn, tends to determine the degree of performance of guidance services. (5) Children's problems requiring guidance assistance are being met most adequately when beginning teachers are required to demonstrate a workable philosophy of guidance and an understanding of individual differences. (6) A majority of children's problems are being met in significantly weaker manner by beginning teachers when performance of guidance services involves statistical interpretation, testing, counseling information, and counseling techniques. (7) Child problems in which teachers indicate poorest performance are those concerned with underachievement or overambition, learning difficulties, vocational selection, study skills, economic needs, personal-social adjustment, and self-evaluation.

KENYON, LAWRENCE BUELL. The Value of a Camp Leadership Experience for Teachers and Guidance Personnel With Recommendations for Use in Graduate Training Programs. (Ed. D., 1956, University of Colorado, Boulder.)

Director of study.—C. W. Failor.

Problem.—To discover what value camp leadership experience might have for those planning to enter the field of guidance services or teaching, and to recommend a program through which schools of education might provide for including camp experience as part of the professional training for guidance and teaching personnel.

Procedures.—Survey of the literature, personal contacts with educators having camp experience, and a questionnaire sent to guidance, teaching, and administrative personnel with camp experience.

Major Findings.—(1) Students who are going into education need practical experience in working with people. (2) Camp leadership provides: (a) valuable training in human relations; (b) opportunity to gain insight into a number of concepts useful in understanding children; (c) opportunity for better understanding group processes and techniques; (d)

opportunity to observe and better understand a wide variety of behavior, both positive and negative; and (e) opportunity to become familiar with a number of techniques used in individual appraisal.

Schools of education should allow graduate credit for camp experience, under supervision of school personnel, placing all trainees in one camp, or in camps close enough to a central point to allow participants to meet in weekly seminars. Camp experience could be used in the evaluation of certain personal qualifications necessary for success in teaching or guidance.

KEPPERS, GEORGE L. Survey of New Mexico School Counselors. (University of New Mexico, 1958, Albuquerque.)

Director of study.—George L. Keppers.

Problem.—(1) Training of school counselors, (2) number certified, (3) duties, (4) experience. General survey was the first of its kind in the State.

Procedures.—A questionnaire using percentages and descriptive terms.

Major Findings.—(1) Need for certification, (2) variation in titles, (3) variation in duties, (4) need for definition of terms.

LATHAM, LOUISE M. A Comparative Study of the Work and Professional Status of Head Residents of College and University Halls. (North Carolina College at Durham.)

Director of study.—Louise M. Latham.

Problem.—To determine whether any progress had been made in the work conditions, professional requirements, salary range, and status of head residents of college and university halls since a previous study done in 1947.

Procedures.—Questionnaires sent to 110 colleges and universities in 1957, of which 66 were returned and usable, as compared with 125 sent in 1947, of which 91 were returned and 80 were usable. The 1957 questionnaire covered 51 coeducational institutions and 15 women's colleges, both State and private. At least one institution in 46 States and the District of Columbia received questionnaires.

Major Findings.—(1) Decided increase in salaries; (2) hours still extremely long; (3) job description still vague, but a trend toward clearness of duties, primarily as advisers and counselors; (4) 80 percent of the institutions granting some type of status to these workers in 1957, as compared with 60 percent in 1947; and (5) 59 percent of the institutions making some type of provision for professional growth in 1957, as compared with 36 percent in 1947.

MCCAVITT, MARTIN E. A Manual for Counselors in a Rehabilitation Center.

(Ed. D., 1957, University of Pennsylvania, Philadelphia.)

Director of study.—R. D. Matthews.

Problem.—To prepare a manual for the orientation of staff members in the procedures and policies of a rehabilitation program.

Procedures.—Personal interview and observation at the Institute of Physical Medicine and Rehabilitation, New York University, Bellevue Medical Center; and research and other literature.

Major Findings.—Manual available upon request.

MCDONALD, ROBERT SANDY. The Evaluation of an Inservice Training Program for Teacher-Counselors. (Master's, 1957, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate changes in Information, Concept of Role as Teacher-Counselor, and Acceptance of Self during a 6-week institute conducted in Port Arthur, Tex., during June and July 1956.

Procedures.—A carefully planned series of lectures and experiences, including access to a noninstitution psychotherapist, was offered. Several evaluative tools, including a four-dimensional Q sort, Incomplete Sentences, and an Information Test, were used to measure change. A comparable control group was used.

Major Findings.—(1) The experimental and control groups did not differ at the beginning in terms of Information, Self-Acceptance, or Concept of Role as Teacher-Counselors. (2) The Control Group of regular summer teachers and administrators made little change except toward rejection of the Teacher-Counselor concept. (3) Members of the institute made significantly positive gains in Information about pupils and guidance techniques, Self-Acceptance, and attitude toward the Teacher-Counselor role. (4) The members of the institute, in retrospective evaluation, expressed highly favorable reactions to their experiences. (5) Elements of the institute, which drew highest ratings from participants were the coordinator's lectures, small discussion groups, experience in other subgroups, and opportunity to be a part of the institute. Lowest ratings (though still positive) went to threatening experiences such as Sociometric Project, Self-Concept Inventories, Recorded Interviews, and Peer- and Self-Evaluations.

SEXTON, JANE. A Counselor Training Plan for Camp Archbald. (Master's, 1957, Marywood College, Scranton, Pa.)

Director of study.—Edward Tomaszewski.

Problem.—To provide precamp training and counselor-in-training courses adapted to the particular needs of one unit of Girl Scouts of America, namely, Camp Archbald, the Scranton

ton Council of Girl Scouts, Inc. Particular emphasis given to evaluation and alteration of courses set up in 1951 so as to coordinate them more adequately with the phenomenal growth of the camp.

Procedures.—Questionnaires and checklists submitted to staff members.

Major Findings.—The main objective realized was setting up a specific training course suited to the needed skills of staff applicants through checklists. Indication of three specific areas related to these skills; namely, interest in, experience in, and teaching knowledge of the skills.

Program Organization

ARNOLD, HELEN. The Organization and Administration of a Guidance Program at Harbor Creek, Pennsylvania. (Master's 1956, Allegheny College, Meadville, Pa.)

Director of study.—William P. Wharton.

Problem.—To describe the organization and administration of a guidance program recently developed in northwest Pennsylvania and to add suggestions for a student handbook of nearby colleges.

Procedures.—Empirical. Based on experience, guidance course work, readings, and the local situation.

Major Findings.—Available upon request.

ARWOOD, ALLISON BROCK SELWAY. A Survey of Literature Pertinent to a Student Personnel Program for a Small College. (Master's, 1957, University of Colorado, Boulder.)

Director of study.—Dorothy M. Sherman.

Problem.—To ascertain need and procedures for establishing a student personnel program at Baptist Bible College, Denver, and proper methods for evaluating it.

Procedures.—Review of available literature concerning pupil personnel services in secondary schools and colleges.

Major Findings.—Collection of data and presentation should provide sufficient background for successfully establishing a solid program of student personnel services at Baptist Bible College.

BAUMGART, NORBERT K. An Evaluation of College Days Based Upon Opinions of Iowa State Teachers College Freshmen. (Master's, 1958, Iowa State Teachers College, Cedar Falls.)

Director of study.—Wray D. Silvey.

Problem.—To investigate the effectiveness of the College Day.

Procedures.—The data were obtained from interviews with a random sample of 150 freshmen students enrolled at Iowa State Teachers College who attended a College Day during high school. The interviews obtained data regarding the organization of the Iowa State Teachers College conference sessions, and evaluation of the College Day the students attended. Their comments were recorded verbatim and tabulated into 81 tables.

Major Findings.—(1) Looked to College Day with interest, 77.5 percent; (2) thought the ISTC counselors were well prepared, 92.1 percent; (3) felt the counselors had personalities pleasing to young people, 90.1 percent; (4) thought College Day was worth while, 93.3 percent; (4) influenced by College Day (in deciding to attend ISTC) to a great extent, 28 percent, to a small extent, 47.5 percent, and not at all, 24.5 percent; (5) reporting no followup activity in their schools, 56 percent; (6) thought purpose of College Day was to inform them about the various colleges, 48 percent; to help them choose a college, 16 percent; to stimulate their thinking about colleges, 9.3 percent; (7) the students had various ideas for improving or replacing College Day.

BRYANT, LAWRENCE C. A Recommended Program of Guidance Services Based on a Study of Guidance Practices and Preferences in Virginia and Selected States. (Ed. D., 1958, University of Virginia, Charlottesville.)

Director of study.—Richard L. Beard.

Problem.—To recommend a program of guidance services for the Virginia public schools based on: (1) present practices of guidance services in these schools and the public schools of selected States, (2) opinions of educators and a jury of experts in guidance as to guidance services desirable for public schools, and (3) opinions of authorities in the field of guidance.

Procedures.—By means of a questionnaire, State supervisors of guidance services checked present desirable practices in their States; and division superintendents, principals, and counselors marked these practices in Virginia. A jury of experts in guidance, superintendents, principals, and counselors indicated desirable practices. A stratified random 20-percent sample was made of large, medium, and small secondary, combined, and elementary schools. Principals and counselors of the three groups checked the questionnaires. Another random 20-percent sample was made of supervisors of guidance services in the United States and division superintendents in Virginia.

Major Findings.—(1) The organization and administration services in 10 selected States were generally lower than those in Virginia.

(2) Guidance services were organized and administered in at least three-fourths of the secondary and combined schools. (A considerably smaller number of elementary schools had organized and administered services.) (3) Many of the individual inventory services were not provided to any appreciable extent while others were widely used. (4) With few exceptions, information services were provided in three-fourths of the secondary and combined schools. (5) Counseling services were provided in practically all of the secondary and combined schools. (6) Research services were weak in the Virginia public schools and weaker in the public schools of the 10 selected States. (7) Placement and followup services were weak in the 10 selected States and in Virginia.

BURTON, DONNA LEE. A survey and an Evaluation of Pupil Orientation Programs in the Cleveland Public Secondary Schools. (Master's, 1957, Kent State University, Kent, Ohio.)

Director of study.—

Problem.—To survey and evaluate by the use of definite, established criteria, the orientation programs in the Cleveland public school system.

Procedures.—Data were collected by questionnaire. Sampling for: (a) criteria—13 outstanding authors and workers in the guidance field throughout the United States; (b) data—12 high schools and 24 junior high schools in the Cleveland public school system. Basic statistical treatment of the data—percentages.

Major Findings.—In both junior and senior high schools the criteria most adequately met in the orientation programs were (1) an adequate knowledge of, and feeling of, security concerning the physical plant of the school; (2) an adequate knowledge of the various school services (counseling, health, lost and found, etc.); and (3) a feeling of acquaintanceship with the responsibilities and expectations of the official school personnel.

BURTT, MERILYN N. A study of Nursery School Personnel Practices and Teaching Concepts. (Master's, 1958, Claremont Graduate School, Calif.)

Director of study.—Donald McNamoor.

Problem.—(1) To determine current organizational and administrative practices in nursery schools in the Foothill area of Los Angeles county. (2) To obtain biographical data on the background and training of nursery school teachers in this geographical area. (3) To explore concepts held by nursery school teachers concerning selected areas of child behavior in the nursery school situation.

Procedures.—A questionnaire covering organizational and administrative practices of nursery schools and soliciting biographical information on teaching staffs was distributed

to all licensed nursery schools in the Foothill area of Los Angeles county. A different type of questionnaire, informally called a "situation sheet," was given to the teachers. Forty-nine percent of the schools responded to the personnel practices questionnaire; 53 percent of the teachers replied to the situation sheet.

Major Findings.—Information from the personnel practices questionnaire indicated that nursery school teachers in the area studied are mostly middle-aged, married women, less than half of whom are college graduates. Most of the teaching jobs are part time, the exception being at child care centers. The highest teacher's salary was \$380 per month for a public child-care teacher in a full-day program. Three rating scales applied to teachers' responses to the child behavior situations on the situation sheet proved reliable, indicating that teachers were fairly understanding of aggressive behavior, less accepting of socially withdrawing and of nonconforming behavior; and that slightly more than half of the teachers mentioned the child's feelings when discussing child behavior situations. Differences in scores by types of schools were numerically small, but formed a consistent pattern. Teachers in laboratory, community, and cooperative schools scored at a slightly higher level than teachers in private, parochial, and public child-care centers.

CAMERON, MARGARET. A Study of Provisions Made for Guidance Counseling in Grades Seven and Eight of Selected Independent Schools. (Master's, 1958, The University of Akron, Ohio.)

Director of study.—Mabel M. Riedinger.

Problem.—To make a survey of guidance activities in grades seven and eight of selected independent schools in the Middle West and East; to consider the guidance program in grades seven and eight at Old Trail School, Akron, Ohio; and to develop a program making more adequate provision for guidance counseling functions in grades seven and eight at Old Trail School.

Procedures.—A questionnaire concerning guidance procedures in independent schools was sent to 33 of these schools in the Middle West and the East. The data is 17 completed questionnaires, the investigator's experience as a 7th and 8th grade counselor, and reading in the field of guidance provided the materials for the study.

Major Findings.—In small schools, such as those surveyed, guidance is a school service in which all must participate. Its success depends upon the leadership of the administrator with the full cooperation of all teachers. In the junior high school especially, the home-room teacher is the most important person in the program. All teachers must be guidance minded. Rather than following a rigid schedule of guidance classes, the program

should be flexible to meet needs as they arise. An effective guidance program should consider the needs of both the individual and the group.

CREECH, MARVIN A. Role of State Department of Education on Developing and Improving Guidance Services. (Ed. D., University of Denver, Colo.)

Director of study.—Harry R. Moore.

Problem.—To secure the opinions of Nevada educators regarding the role that the State Department of Education should assume in developing and improving the Nevada public school guidance services. The ultimate objective was to design a developmental program of essential services to be provided by the Guidance Services Staff, State Department of Education.

Procedures.—Data were collected through a questionnaire mailed to Nevada educators, including all county superintendents, secondary school administrators, and counselor and supervisory personnel, who had guidance responsibilities. Administrators of elementary schools with more than three teachers were also included in the study population. The data were analyzed by calculating the percentage of responses which favored each item.

Major Findings.—Nevada educators feel that the State Department of Education has an important role in training guidance personnel, in administering State and local programs of guidance services, and in research. Almost equal in importance are responsibilities for developing and publishing professional materials for local school systems in the development, operation, and evaluation of guidance programs; and for maintaining a library of professional books, occupational literature, educational information, measuring devices, and guidance forms. A plan was proposed for the State Department of Education to provide the services.

DAUGHTREY, JOHN P. An Analysis of Students and Faculty Reaction to Student Personnel Services at the University of Florida. (Ed. D., 1953, University of Florida, Gainesville.)

Director of study.—Leon M. Henderson.

Problem.—To further research efforts in college student personnel programs through an analysis of student and faculty reaction to the comprehensive program at the University of Florida.

Procedures.—Wrenn-Ramm form, *An Inventory of Student Reaction to Student Personnel Services*, submitted to 900 students. C. A. Mahler's form *The Personnel Services as You See Them*, submitted to 100 faculty members. Analysis by item and by the 10 areas of service for 18 student subgroups and 25 faculty subgroups, expressed in terms of percentages, ratios, and chi-square results.

Major Findings.—The student personnel program was judged favorably by faculty and students, but was not adequately communicated to either group. Various student groups reacted differently toward the program; the faculty groups were more uniform. Basic data for a more complete appraisal was obtained. Recommendations: That increased efforts be made for more and better communication and for integration of services; that contacts be increased between small groups of faculty and students; that the Advisory Committee to Student Personnel consider adopting an evaluation plan.

DOI, EDITH HANAYO. Teacher Participation in Guidance Services. (Ed. D., 1957, University of Colorado, Boulder.)

Director of study.—Francis E. Clark.

Problem.—To develop a self-rating checklist to assist teachers in identifying the ways in which they contribute to the guidance services of their schools.

Procedures.—Cooperation was enlisted from teachers in 10 schools. Three forms of a questionnaire or rating scale were administered before the final form was selected. Interviews were conducted with about one-third of the teachers to ascertain their reactions to the completeness of the rating sheet and their acceptance of the kinds of guidance methods listed. Also the rating sheet was administered to them. The kind of college degree, the teaching load, and the subject field of teachers in three of the schools were investigated to discover whether these factors might be related to the participation of these teachers in their schools' guidance services. One of the 10 schools had evaluated its guidance program through a survey based on the Colorado Criteria. Ratings of a teacher committee using the Colorado Criteria were compared with the teacher self-ratings in order to locate agreements or disagreements in ratings.

Major Findings.—Development of a self-rating checklist: some information about the participation of teachers in guidance services as indicated by teacher self-ratings; a preliminary exploration into relationship of certain factors to teacher participation; and the comparison of teachers' self-ratings and ratings by a teacher committee.

DONOHUE, PHILIP J. A Survey of the Curricular Offerings of Ranch Schools in Southern California. (Master's, 1957, San Diego State College, Calif.)

Director of study.—James M. Linley.

Problem.—To gather information on the nine southern California ranch schools, the educational facilities of the honor camps, so that the data might be available to persons concerned with ranch-school programs.

Procedures.—(1) Review of available data from published materials, interviews, and case

histories; (2) visits to the southern California probation honor camps. In step one, many sources of information were investigated. Interviews were sought with persons of authority with the California Youth Authority. Permission was obtained to use case histories of individuals assigned to one camp. The second phase provided an opportunity to gather data on ranch schools and probation honor camps. A detailed description of one honor camp and school was secured at this time.

Major Findings.—The treatment and care of juvenile offenders has undergone radical change within the last few years; there is great similarity between ranch schools, although programs do not start from a common basis; dual administrations exist in all camps. Eight honor camps and ranch schools are under the county probation departments and county superintendents of schools; the remaining institution is controlled by two county probation departments in conjunction with the local school district. There is a lack of scientific means for determining who should be placed in honor camps and an absence of followup programs.

DORBUSHIN, DOROTHY. Proposed Guidance Program for the Three-Year Hospital Nursing School. (Master's, 1956, Duquesne University, Pittsburgh, Pa.)

Director of study.—Regis Leonard.

Problem.—To provide a broad, flexible base which might be adapted as conditions warrant.

Major Findings.—Results available upon request.

FORDYCE, JOSEPH WARDER. An Analysis of Evaluative Studies in Selected Areas of Guidance. (Ed. D., 1954, University of Florida, Gainesville.)

Director of study.—Charles R. Foster.

Problem.—To determine reasons why guidance services have not been well accepted by schools.

Procedures.—Questionnaires sent to random group of school administrators to discover problem areas; areas classified and research on these areas studied and brought together with pertinent questions as to sound methods of evaluation. Findings classified by areas as improvement of curriculum, helping teachers understand pupils, development of personal qualities, and choice of occupations.

Major Findings.—(1) Occupational guidance has yielded good results. (2) Teacher-pupil relationships have been improved by guidance programs. (3) Curriculum improvement has followed guidance, including vocational guidance. (4) There is a need for guidance to assist in developing personal qualities. (5) There is a need for clearer knowledge of the functions of teachers in a guidance program. (6) Guidance goals should be determined, and

a continuous evaluation made of progress toward these goals.

FROELICH, CLIFFORD and ANTIOCH UNIFIED SCHOOL DISTRICT. Recommendations From District Self-Study of Counseling and Guidance. (1958)

Director of study.—Clifford Froehlich.

Problem.—The development of materials and procedures for district self-study of guidance and counseling.

Procedures.—(1) Interviewed staff members. (2) prepared questionnaires designed to obtain opinions and recommendations for improving the overall guidance program. (3) tested questionnaires and formulated recommendations.

Major Findings.—Results available upon request.

GLANCY, KEITH E. Administrative Practices and Opinions Relative to Non-credit Adult Education Programs in Selected Colleges and Universities. (Ph. D., 1958, Purdue University, Lafayette, Ind.)

Director of study.—Elizabeth K. Wilson.

Problem.—To survey and evaluate administrative and operational procedures in non-credit adult education at the university level. Differences in attitudes were hypothesized within eight variables dealing with the type of school, geographical location, size of the community, student enrollment, title of the respondents, the area of responsibility, per capita expenditure for public school education, and type of noncredit program.

Procedures.—A two-part questionnaire was submitted to representatives of 335 major colleges and universities. One part asked for functional information about current practices and the other contained statements of opinion dealing with seven areas. A modified chi-square distribution was used to determine whether significant differences existed in the responses to each question as distributed by each variable. By grouping the responses in agreement with each statement and then grouping the remainder, it was possible to construct a table.

Major Findings.—The expression of attitudes was not closely related to the method of operation reported by the respondents. Since the results were not greatly affected by the selection of institutions or individuals, they should be generally applicable. Significant differences in attitude toward administrative problems existed among State, municipal, private, Protestant and Catholic institutions, with the exception that the differences between the private and Protestant schools were limited and inconclusive. Significant differences were also found between schools having

primarily a noncredit class program and those having conference and institute programs.

GUEYARRA, MARIANO RELUCIO. A Survey of the Status of Guidance Services in the Philippine General Secondary Schools. (Master's, 1957, University of Colorado, Boulder.)

Director of study.—Dorothy M. Sherman.

Problem.—To find out the status of guidance services in the Philippine general secondary schools as a basis for future development, improvement, and expansion of guidance programs.

Procedures.—Questionnaire sent to 82 schools; plus usable data furnished by principals, counselors, and classroom teachers.

Major Findings.—Significant weakness in counselor preparation, provision for time and scheduling in counseling, socioeconomic information, placement, and followup. Research and evaluation are urgently needed. The attitude of students, teachers, parents, and administrators was highly favorable for promotion of guidance programs in the schools.

HARRIS, PHILIP. A Survey of the Guidance Services Provided for Business Students in Selected Catholic Secondary Schools of the State of New York. (Master's, Fordham University, New York, N.Y.)

Director of study.—James A. Cribbin.

Problem.—To survey the guidance services provided for business majors in 106 selected Catholic secondary schools of the State of New York.

Procedures.—The subjects were 19,281 pupils in grades 9 through 12 who were registered in the business curriculum of the selected schools. To secure the necessary data, the investigator interviewed an official representative in all but 5 of the 106 schools. A questionnaire of 49 items was used in each of the selected schools which offered three or more business subjects.

Major Findings.—The number of business students in these Catholic schools was comparable, on a percentage basis, with that of public schools in the State of New York. Five major business subjects offered by public schools were also available in these selected schools. Guidance personnel in number and training were below the ideal, but compared favorably with similar data reported in the studies reviewed on public education. The total guidance was not being adapted to the special needs of business students. The typical counselor in the Catholic schools was the principal. Although sufficient office space was available for guidance directors and full-time counselors, this was not true for part-time counselors. Adequate job opportunities were available for business graduates. Two-thirds

or more of the schools provided some part-time and full-time placement for students. Although a small number of schools had a large number of business graduates going to college, the majority of these graduates went directly into the business world. The respondents were cognizant of the strong and weak points of their guidance programs, and about a quarter of the schools had definite plans to improve the needed services.

HEYWOOD, HAROLD L. A Comparative Study of the Effectiveness of Various Organizational Patterns of Rural School Guidance Programs as Judged From Vocational Choice of Seniors. (Ed. D., 1956, University of Southern California, Los Angeles.)

Director of study.—Earl F. Carnes.

Problem.—To study the effects of various guidance organizational patterns on rural youth.

Procedures.—Eighty-eight Montana high schools, each having fewer than 200 students, were included in the study. The groups compared were seniors who had experienced 4 years of one of the following guidance organizational patterns: group 1, scheduled interviews by a teacher-counselor; group 2, teacher-counselor, but no scheduled or organized interviews; group 3, scheduled, organized interviews by administrator-counselors; group 4, administrator-counselors with no scheduled, organized interviews. These original groups were reorganized for comparison with common elements.

Major Findings.—(1) The smaller the school, the more likely that interviews were handled in a hit-or-miss fashion by the administrator. (2) In schools having interviews by administrators, there were more dropouts during 4 years; the girls choosing nursing and the boys choosing engineering had lower intelligence than in schools having organized interviewing by teacher-counselors. (3) As opposed to unorganized interviewing, the following differences, regardless of type of counselor, were found in favor of organized interviewing: fewer dropouts in 4 years, fewer undecided seniors; boys selecting engineering had higher intelligence; more high-ability girls and low-ability boys chose professional and kindred jobs; and the girls who chose nursing had higher intelligence.

JOHNSON, GORDON VAN HAGAN. Measurement of Guidance Activities in First-Year Algebra. (Master's, 1957, San Diego State College, Calif.)

Director of study.—George A. Koester.

Problem.—To devise a guidance and counseling program that would (1) be possible for any teacher of first-year algebra to organize, implement, and complete with the normal teach-

ing materials used in a 4-year high school; (2) to show the existence of, and the measured differences between, two equated classes in first-year algebra based on the results of tests, quizzes, and enrollment in plane geometry; and (3) not to reduce the amount of course material ordinarily covered.

Procedures.—The project was conducted at Brawley Union high school during 1954-1955. Two classes were equated as experimental and control groups at the end of the first 3 days of school, based on IQ test, chronological age, and grade level in the 4-year high school. The experimental groups discussed their own problems, and upperclass students demonstrated the use to which they had put their knowledge in first-year algebra. Students, parents, and teachers were involved in showing learning-process response. Individual and group guidance, which involved group dynamics, was carried out with the experimental class.

Major Findings.—Statistical analysis of the test and quiz grades of the experimental and control groups revealed a positive and significant difference between the two groups in favor of the guidance program.

KEATE, JOHN JAMES. A survey of Guidance Activities Conducted by Utah High Schools To Assist Students To Prepare for and Enter College. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Phelon J. Malouf.

Problem.—To study the guidance activities of Utah high schools for helping students decide on a college, complete college preparatory programs, and follow through in gaining admission to college.

Procedures.—A questionnaire was sent to every public high school in Utah in order to secure basic data about the activities conducted to assist students to prepare for and enter college. Six educational authorities were selected and asked to read the questionnaire and say what they thought should be done with reference to the activities.

Major Findings.—(1) The educational authorities agreed that students should be helped in making decisions. (2) Differences were found between the recommendation of the authorities and the activities reported by the schools in the following areas: (a) providing information about entrance requirements, entrance examinations, applications, and financial assistance; (b) planning high school academic programs; (c) college days and visits to colleges; and (d) parental participation in planning.

KLEIN, RUTH. A Critical Analysis of Public School Nursing in New Jersey. (Ed. D., 1958, Rutgers, The State University, New Brunswick, N.J.)

Director of study.—William H. Athins.

Problem.—To analyze critically the functions of New Jersey public school nurses.

Procedures.—Descriptive survey.

Major Findings.—The majority of New Jersey public school nurses have obtained only the basic nursing school diploma—only a small portion hold an academic degree of any kind. The hospital schools of nursing, rather than the collegiate schools, are the principal institutions preparing public school nurses. The technical competency obtained through the basic nursing diploma program does not adequately prepare nurses for public school nursing. It is therefore necessary for the nurse to continue her education in order to perform school-nurse functions, not only in her specialized area of preparation but also in her personnel work. As the number of nurses employed in New Jersey has increased, there has been a concurrent strengthening of the certification requirement for public school nurses. In many respects the school health services, as currently operating in the public schools, do not measure up to minimal recommended standards.

LANDCASTER, EVELYN PIERCY. A Comparative Study of the Attitudes Toward Guidance Functions Expressed by High School Students and Their Parents. (Master's, 1958, University of Texas, Austin.)

Problem.—To study the attitudes of students and their parents toward the educational functions of guidance, administration, curriculum, and instruction.

Director of study.—Royal B. Embree.

Procedures.—A forced-choice instrument, similar to Part II of the Allport-Vernon-Lindzey Study of Values, was developed to measure the relative value or significance assigned to each of the four functions. This was given in January 1954 to all students in grades 9 through 12 at the Belton (Tex.) high school, and to as many parents as could be reached. After the vocational counseling program, the device was administered a second time to students and parents. Results were analyzed by means, standard deviations, and t-tests, based on difference between means and mean differences.

Major Findings.—(1) Parents assigned a significantly higher value to guidance functions following the vocational counseling program. The increase was accomplished at the expense of administrative and instructional functions. (2) Student ratings showed few significant changes except for a significant decrease in importance assigned to the guidance function by 11th-grade students. (Test interpretation was known to have been poor in this case.) (3) Parents tended to assign higher value to guidance objectives than did students. (4) Students in the 9th grade tended to rate guidance objectives lower than did those in the 10th, 11th, and 12th grades. (5) The order

of ranking in terms of importance on the first administration of scale was guidance, curriculum, instruction, and administration. On the second administration, the order remained the same, but the guidance function was more sharply in first place than before.

LAWSON, S. THOMAS. A Guidance Program for Junior and Senior High Schools of Oneida County at Malad, Idaho. (Master's, 1957, Utah State University, Logan.)

Director of study.—John C. Carlisle.

Problem.—To determine what authorities think is a good basic guidance program and to adapt this program to the needs of the junior and senior high schools of Oneida County, Idaho.

Procedures.—A survey was conducted of the 48 States and the Territories of Alaska and Hawaii to determine what various authorities believed a good guidance program should contain. The features characterizing a good guidance program were then applied to the needs of the specific school system. Guidance handbooks and related materials from 32 State agencies and several books of recognized authority in the field of guidance were read. From these sources a careful selection of guidance essentials was obtained.

Major Findings.—The success of the guidance program in any school will depend largely on the degree to which the staff supports it. Guidance programs initiated with careful planning with a professional and sympathetic staff are likely to be of great value and to become a permanent function of the school.

LONG, SAMUEL MURRAY. The Coordination of Instructional, Administrative, and Student Personnel Services in Pennsylvania's State Teachers Colleges. (Ed. D., 1958, The Pennsylvania State University, University Park.)

Director of study.—Robert B. Patrick.

Problem.—To discover the manner and extent to which administrators of student personnel services, other college administrators, and faculty members in Pennsylvania's State teachers colleges work in an organizational structure to accomplish the objectives of student personnel services.

Procedures.—A review of the literature pertaining to student personnel services in colleges was made. Data were collected through questionnaires filled out when the author of the study visited each of the 14 State teachers colleges in Pennsylvania.

Major Findings.—The student personnel services in all of the Pennsylvania State teachers colleges included: established procedures for recruitment and admissions, freshman-week activities, standardized testing programs, placement, housing, food and health

services, financial, extra-class and religious programs, opportunities for student government, established procedures for maintaining student personnel records, and administering discipline. Three-fourths of the colleges conducted freshman orientation courses and faculty advisory programs. More than half provided remedial services in the areas of emotional adjustment, speech, reading, and study techniques. One-fourth provided for research and evaluation of student personnel services.

Freshman orientation programs should be improved in most of the Pennsylvania state teachers colleges by lengthening the time for their activities and by providing upper-classman counseling services for freshman students. Overall coordination of the programs is needed in all the colleges. A majority of them have met, in most respects, the criteria of the study pertaining to student housing and placement.

In numerous other personnel services, the colleges should plan more effectively, particularly in the coordination of the overall personnel programs with the work of the deans of men and of women, and with the work of directors of recruitment, admissions, and placement; and in the appointment of student personnel councils responsible for formulating policies, performing research, and evaluating student personnel services.

LURICK, EMIL EDWARD. A Study of Job Placement Policies and Practices in California Junior Colleges. (Ed. D., 1958, University of Southern California, Los Angeles.)

Director of study.—Earl F. Carnes.

Problem.—To determine the status of job placement policies and practices in California public junior colleges and to evaluate the findings in terms of accepted criteria.

Procedures.—Questions were sent to the chief administrators of all public junior colleges of California asking detailed questions about their philosophies of placement, organization, and administration of placement services, techniques and procedures of placement, and related services associated with job placement programs. Analyses were made comparing schools of different sizes and comparing actual practices with stated philosophies.

Major Findings.—(1) Placement, although considered a legitimate service for junior colleges, should cooperate with public agencies that contribute toward appropriate job placement of students. (2) The placement office should serve as a clearinghouse for students, faculty, and employers on all matters pertaining to job placement and occupational information. (3) Services of the placement office should not be limited to referring students to job openings, but should include occupational information, vocational counseling, public re-

lations, and followup. (4) Business, industrial, and other outside contacts made by various school personnel should be coordinated by the placement office. (5) The placement function should not be the responsibility of, or left to the discretion of, individual departments or instructors, but some one person should be assigned the responsibility of coordinating the services. (6) The placement program should be adequately publicized to staff, students, and employers.

McKENNA, JAMES W. A Study of the Feasibility of Using a Cumulative Record Form for Transferring Students' Cumulative Records in the Public Schools of Massachusetts. (Master's, 1956, Springfield College, Springfield, Mass.)

Director of study.—Seth Aronian, Allen R. Kaynor, and C. Eugene Morris.

Problem.—To evaluate a cumulative guidance record originally developed at the Ipswich public schools, and to examine the feasibility of its use for transferring cumulative guidance records of transferring students in the public schools of Massachusetts.

Procedures.—Survey of literature and of the opinions of guidance directors, and counselors in the elementary and secondary schools in Massachusetts.

Major Findings.—Transfer of parts of cumulative record information is both possible and desirable. Further research is recommended to set up a uniform statewide cumulative form to facilitate transfer.

MOORE, GILBERT. An Investigation of Certain Aspects of a Guidance Program. (Ed. D., 1958, University of California, Berkeley.)

Director of study.—C. P. Kroehlich.

Problem.—To study certain aspects of student learning in areas covered by the guidance program in the Hayward Union High School District. Learning was measured by a test of guidance knowledge. Scores were related to such factors as time in the Hayward program, number of years with the same counselor, counselor training, sex, IQ, vocational choice, and types of curriculum followed. The test used was a local revision of the Kefauver-Hand Tests of Guidance, and called the "What Do You Think?" test.

Procedures.—Original scores were obtained from freshmen in September 1954. The same class of students was retested, as seniors, in April 1958. The student sample included 1,188 seniors out of a population of 1,340. The counselor sample included all of the 12 counselors who taught and counseled seniors. In addition to taking the test, students filled out a questionnaire which categorized them by sex, years with the same counselor, and the factors used. Counselors answered a

questionnaire to show the number of graduate semester hours they had taken in guidance or counseling psychology. A series of hypotheses was tested.

Major Findings.—Over a 4-year period students achieved significantly higher scores on the test. Seniors in the Hayward program 4 years had significantly higher scores than seniors who transferred into the program after the freshman year. The factors of sex, IQ, vocational choice, and academic program were found not to be independent, but to be related somehow to high and low scores. Students who had more than one counselor during the 4 years did better than students who had had the same counselor; but counselor training, as defined in this study, was not associated with higher scores. Four-year and transfer seniors whose counselors had less training had higher scores than seniors whose counselors had more training. It was concluded that the test was not discriminating enough at the higher levels.

There was no evidence to support the idea that more time with a counselor is conducive to more guidance learning. The material measured by the test was learned better by girls, students with high IQ, students with vocational choice, and students pursuing a college-preparatory program. The guidance material may be of such an academic nature that students in the categories named above would normally display more aptitude or academic interest. The instrument may have been measuring factors relating more to the counselor's teaching ability than to his ability in guidance.

MORAN, CARLTON G. The Organization and Administration of a Guidance Program for the Verona (Oreg.) Union High School. (Master's, 1957, Willamette University, Salem, Oreg.)

Director of study.—J. R. Lyles.

Problem.—To explain construction of a guidance program designed to fit the needs of the students in a particular high school.

Major Findings.—An analysis of the benefits derived and improvements needed for further development of the guidance services at Vernonia Union High School.

MORTVEDT, DONALD F. How the Student Perceives the Counselor's Role. (Master's, 1957, Illinois State Normal University, Normal.)

Director of study.—Stanley S. Marzoff.

Problem.—Upon what kind of problems do high school students think they should consult the school counselor?

Procedures.—Chosen on the basis of their availability in study halls, 190 public high school students were given a questionnaire asking whom they would consult about each

of three problems in each of three areas: personal, educational, and vocational. Possible consultants were teacher, clergyman, parents, counselor, friend.

Major Findings.—On the whole, students preferred consulting with their parents. The parents were first choice for personal and vocational problems; the counselor second, for educational and vocational problems, and fourth for personal problems. Students did not consider that the counselor was involved in disciplinary problems. These findings can scarcely be generalized beyond the particular high school. Comparison of schools using responses from such a questionnaire might well reveal marked differences in counselor climates.

NELSON, LA VERNE W. A Survey of Student Personnel Practices in the Junior Colleges of the North Central Association of Colleges and Secondary Schools. (Ph. D., 1958, University of Wyoming, Laramie.)

Director of study.—Lyle L. Miller.

Problem.—To survey student personnel practices in the junior colleges located in the area where the North Central Association of Colleges and Secondary Schools functions as the accrediting agency, and to obtain an overall view of the scope and status of these services for the academic year 1955-56.

Procedures.—Data on personnel practices were obtained through a comprehensive questionnaire. Copies were sent to the person designated as the administrative head of the 191 institutions located within the stated area and included in the Junior College Directory of the *Junior College Journal*, January 1956. Completed questionnaires were received from 122 of these institutions. In order to validate and to implement the data, visits were made to 10 of these 122.

Major Findings.—(1) Student personnel services have a special significance for the junior college. Enrollment of a large percentage of students in 2-year terminal programs makes guidance and counseling urgent to assist students with educational and vocational planning. (2) Junior-college administrative officers and directors of student personnel services emphasize assistance for the student in all areas in which problems may arise. (3) Increasing the staff with persons professionally trained in student personnel services and establishing an adequate budget to secure such persons are recognized as primary needs for improving the services. (4) No consistent pattern was found as to the responsibility, either for formulation of policy or for administration of student personnel services.

NESTICO, RALPH. A Comparative Study of Selected Aspects of Vocational Guidance in France and the United States.

(Ph. D., 1958, University of Connecticut, Storrs.)

Director of study.—Edward A. Wicas.

Problem.—To discover, if possible, some implications for vocational guidance in the United States in the practices and techniques adopted in France.

Procedures.—(1) An examination was made of publications of various French agencies. (2) Vocational guidance practices and techniques in Paris vocational guidance centers were observed and studied. (3) Time was spent at the National Institute of Vocational Guidance in Paris and conferences were held with counselors and professors. (4) Lectures on French culture and civilization were attended to furnish social and political background information for the study.

Major Findings.—(1) The possibility of experimenting with federally supported vocational guidance centers in key cities in the United States to supplement the available services and to help solve the problem of inequities which now exist. (2) A reexamination of the training programs for counselors with a view to establishing a uniform set of standards through some central governmental agency. (3) A review of the provisions for school leavers, with special consideration to reestablishing an apprenticeship program and providing placement and a terminal medical examination in order to effect a proper transition from school to work.

PERKINS, HAROLD W. A Proposed Pre-College Counseling Program for Larger Colleges and Universities in the United States. (Ed. D., 1957, The Pennsylvania State University, University Park.)

Director of study.—A. M. Wellington.

Problem.—To propose a precollege counseling program to take place after admission but prior to "Freshman Week," for large colleges and universities.

Procedures.—(1) Survey of practices of 119 large institutions; (2) intensive survey of 27 selected institutions.

Major Findings.—(1) Larger colleges and universities were using the following practices, principally in precollege counseling: Testing of scholastic aptitude and English and mathematics achievement; interpretation of test results; educational and vocational counseling; tour or group visit of campus; personal interview on campus; and the precollege conference. (2) Among 27 selected institutions with an organized precollege counseling program, all practices cited in (1) were in effect in some institutions; were thought by administrators, faculty members, and freshmen to be done better in the precollege period; and were thought by all respondents to be valuable experiences for new students. (3) Four general practices were

proposed to develop a program of precollege counseling: a series of 2-day precollege conferences, guidance service available through the year, meetings between new students and college representatives in local areas, and remedial or credit course work during the precollege period. (4) Precollege counseling is a feasible extension of orientation services of larger colleges and universities.

PORE, I. B. *The Historical Growth and Development of the North Carolina Guidance Movement.* (Ph. D., 1958, University of North Carolina, Chapel Hill.)

Director of study.—W. D. Perry.

Problem.—To study the historical growth of guidance services in North Carolina.

Procedures.—Research among various libraries; letters written to different schools, colleges, and universities engaged in guidance and counseling in North Carolina.

Major Findings.—(1) The guidance movement in North Carolina has been influenced by various organizations that have issued publications, sponsored conventions and programs, provided speakers and financial help, purchased guidance materials and equipment, etc. (2) Guidance in North Carolina probably began as an organized course in vocational guidance for teachers given at the 1924 summer session of North Carolina State College. (3) The Craven County guidance program was the first countywide demonstration of guidance in North Carolina.

PRESTON, ANDREW C. *Modern Educational Philosophy as Related to Guidance and Personnel Work.* (Ed. D., 1949, University of Florida, Gainesville.)

Director of study.—C. R. Foster.

Problem.—To attempt to discern clear ideals of the special field of guidance in education.

Procedures.—Appraisal of textbooks in the field of guidance and of three philosophical approaches to guidance; namely, idealism, realism, pragmatism.

Major Findings.—A synthesis of values to be derived from the three schools of philosophy, plus the unique contribution of guidance toward a more unified approach upon which guidance principles may build.

RICHARDSON, MARJORY GARWOOD. *Confusion and Communication in College Admissions.* (Master's, 1958, Allegheny College, Meadville, Pa.)

Director of study.—William P. Wharton.

Problem.—To assess the problems of college-high school admissions communication and to see what could be done to improve flow of information from colleges to high school, and vice versa, for students' guidance regarding applications.

Procedures.—Questionnaires to graduates and colleges; and statistical comparisons, using percentage tables.

Major Findings.—Colleges do not actually lack room to accommodate new students. Subsidiary findings were also developed.

RIDDLE, CHARLES WAINWRIGHT. *The Role of Selected Protestant Denominations in Providing Guidance Services for Their Young People.* (Ed. D., 1958, University of Colorado, Boulder.)

Director of study.—C. W. Fallor.

Problem.—To ascertain the role of selected Protestant denominations in providing guidance services.

Procedures.—The role was studied as it has existed, as it exists at present, and as it might possibly exist, with regard to: (1) the historical background of the Church in guidance; (2) the responsibilities for providing guidance services; (3) the guidance services being provided by selected local churches, either by means of their own resources or in cooperation with the local public high schools; (4) present and possible cooperative guidance relationships between selected local churches and local public high schools; (5) guidance services which could and/or should be provided by local churches; (6) the principles which should underlie church guidance planning. The literature and opinions of selected personnel were used, including guidance authorities and authorities on pastoral counseling, officers of denominational headquarters, the clergy of local churches, and directors of guidance in public high schools. The denominations selected for study were the Methodist, Disciples, Episcopal, and Presbyterian U.S.A.

Major Findings.—Guidance provided in the churches is peripheral and not central to the youth program. Counseling is carried on without sufficient recording or knowledge of the individual's abilities, interests, aptitudes, or progress in the public schools. More cooperation could be effected between the churches and the public schools. School guidance personnel are more willing to be used by the clergy in church guidance programs than clergy are desirous of requesting their assistance. The present objectives of church guidance services are not adequate to meet the needs of young people in making their choices and adjustments with regard to their occupations, training, and personal-social problems.

ROWRAY, RICHARD D. *An Historical Study of the Student Personnel Program in Men's Residence Halls at Michigan State University 1855-56 through 1954-55.* (Master's, 1958, Iowa State Teachers College, Cedar Falls.)

Director of study.—Wray D. Silvey.

Problem.—To trace the history of the student personnel program in the men's residence halls at Michigan State University from its beginning in 1855 to the end of the school year, June 20, 1953.

Procedures.—The data were obtained from annual reports of the secretary of the Michigan State Board of Agriculture, annual reports of the president of the university, books, college newspapers, college catalogs, other published and unpublished materials, and interviews with persons who had participated in the program professionally.

Major Findings.—(1) The number of stated goals and phases of personnel work in residence halls increased as the program developed. Student personnel methods appeared to have been influenced by programs in other colleges and universities, by enrollment, physical facilities, and a nationwide movement in guidance and counseling. (2) Presidents of the institution and faculty members assigned to administrative duties involving the residence halls provided leadership in the development of the student personnel program. (3) Changes in the student staffing of residence halls have included an increase in educational qualifications, with less emphasis on discipline and policing duties, and an increased emphasis on advising and counseling.

SANBORN, MARSHALL PHILLIP. A Secondary School Program Evaluation Based on Four Criteria. (Master's, 1958, Iowa State Teachers College, Cedar Falls.)

Director of study.—Wray D. Silvey.

Problem.—To secure data from four sources in order to discover some of the important personal, social, vocational, and academic needs of secondary school students in a small northwestern Colorado community; to establish the need not only for organized local guidance and counseling services, but also to point out specific conditions in the school program which should be improved.

Procedures.—Intelligence and achievement scores were taken from the school records and scholarship information regarding graduates in colleges from the registrars of five Colorado tax-supported institutions. The Mooney Problem Check List was administered to secondary school students in order to identify problem areas, and a followup questionnaire was sent to all 1953-57 high school graduates. An attempt was made to verify significant evidence through two or more of these sources.

Major Findings.—The intelligence-achievement investigation revealed a significant disparity between the measured abilities of students and scholastic achievements, greatest at extreme ends of IQ ranges. In addition to a variety of distracting problems of a per-

sonal nature, the problem checklist responses of the students showed a general attitude of disinterest and lack of self-discipline in schoolwork. Although a relatively large proportion of the graduates had enrolled in college, the dropout rate was severe and the percentage of academic suspension was worthy of attention. The freshman academic marks at college indicated certain consistent weaknesses in the educational background of the graduates. Followup questionnaire returns from over 60 percent of the graduates revealed a general satisfaction with most aspects of their high school experiences, but a common agreement concerning several areas for improvement. A synthesis of all the findings encouraged the conclusion that organized guidance and counseling services would be a worthy addition to the school program.

SHEA, ELLEN. The Prognostic Value of Admissions Procedures in a State Teachers College. (Ph. D., 1957, University of Connecticut, Storrs.)

Director of study.—Edward A. Wicas.

Problem.—To study the prognostic value of the admissions procedures and instruments currently in use at the State Teachers College, Bridgewater, Mass.

Procedures.—(1) Correlations were computed between the scores of the entrance examinations and the first- and second-semester G.P.A.'s. (2) The relationship between success and failure and personal and socioeconomic data recorded in high school cumulative folders was studied by the chi-square technique. (3) College admissions data were computed to show what percent of the failing students had been recommended by their high school principals and graduated in the upper quarter of their class. A followup study indicated the final academic status of these students. (4) A questionnaire was administered to freshman women concerning problems of college adjustment. (5) A school and college conference was held for faculty members, high school personnel, and students.

Major Findings.—(1) The English Achievement Test proved to be a better prognostic instrument than the ACE Psychological Examination. (2) The admissions blanks should request information regarding a candidate's IQ, attendance record, family conflict problems, study habit problems, and financial, socioeconomic, and emotional problems. (3) High school marks predict success more accurately than the principal's recommendation. About one-third of the failing students repeated the work and continued in college; half of them were asked to withdraw, and the remaining group withdrew voluntarily. (4) The questionnaire concerning college adjustment revealed that the following problems are most serious: biology, study habits, personality conflicts with teachers, commuting, English composition, social adjustment,

finances, and poor academic preparation. (5) The school and college conference program clearly showed a need for closer cooperation between the teachers colleges and the high schools of the State.

SOLOMON, ALICE THORNE. A Study and Analysis of Some Problems that Hinder Development and Expansion of Guidance Services in a Group of Selected North Carolina High Schools. (Master's, 1957, North Carolina College, Durham.)

Director of study.—Ray Thompson.

Problem.—To determine the problems that hinder the development and expansion of guidance services in a group of selected North Carolina public high schools.

Procedures.—(1) The author prepared a questionnaire for the quantitative status survey. (2) She collected items for this questionnaire from selected literature, professors, and graduate students at North Carolina College, and from a mimeographed form provided by the Counselor-Trainer at North Carolina College. (3) The returned questionnaires were analyzed on the bases of types of administrative units, organizational patterns of the schools, provisions for guidance, and problems that hindered the development of guidance services.

Major Findings.—(1) Varied types of guidance activities should be available to pupils. (2) A lack of consensus concerning guidance terminology represented a serious hindrance to the movement. (3) North Carolina high schools accredited by the Southern Association fell into six major organizational patterns, the union school being the most typical. (4) A majority of the accredited schools in North Carolina were giving organized guidance services. (5) Three-fourths of the responding administrators had taken one or more courses in guidance. (6) Most of the certified counselors were employed in city schools. (7) Twenty major problems hindered the development and expansion of guidance services in the schools studied.

STEDMAN, ROSE EDITH. The Role of Student Personnel Services in the Development of the Gifted Student. (Master's, 1956, Claremont Graduate School, Claremont, Calif.)

Director of study.—Rose Edith Stedman.

Problem.—To find out whether student personnel services might be used to overcome some of the handicaps known to limit the development of talented youth.

Procedures.—The questionnaire was developed with the aid of Dr. F. T. Perkins, professor of psychology, Claremont Graduate School; Miss Helen Fisk, executive director, and Miss Winifred Hausam, advisory director of Western Personnel Institute; and Dr. D. D. Feder, dean of students, University of Denver, chair-

man of the institute's research committee. Twenty colleges and universities, members of the institute, participated in the study. Preliminary findings were discussed by the Academic Council of the institute at the annual meeting in 1955.

Major Findings.—Student personnel services have much to offer in the way of a positive educational experience for all students and especially for the gifted students. Specific suggestions are made for more intensive work with gifted students and for further studies.

STICKLER, W. HUGH. Relationships Between Types of Housing and Academic Achievement; A Study of Florida State University Freshmen, 1955-56. (Florida State University, Tallahassee.)

Director of study.—W. Hugh Stickler.

Problem.—To determine what relationships, if any, exist between types of housing and academic achievement, particularly at the freshman level.

Procedures.—(1) Sample studied: Unmarried freshmen students, under age 26, who lived in the same type of housing during the entire academic year 1955-56; limited to Florida students carrying a full academic load (12 semester hours). (2) Data gathered: (a) sex, (b) type of residence, (c) veteran-non-veteran (men students only), (d) fraternity-sorority member or nonmember, (e) percentile score on total A.C.E., (f) grade-point average for entire academic year 1955-56.

Major Findings.—(1) Findings were in general agreement with earlier studies: (a) in establishing university-owned dormitories as highly desirable types of student-housing for freshmen, (b) in finding academic achievement among freshmen men substantially better in university-owned dormitories than in fraternity-chapter houses, and (c) in casting doubt on the advisability of allowing freshmen students to live out in town on their own responsibility. (2) Freshmen in university-owned dormitories had substantially higher academic achievement than for those living in fraternity chapter houses and in town. (3) Order of desirable housing: dormitories, home, fraternity-chapter houses, in town. (4) In all types of housing, nonfraternity men made higher median grade-point averages than fraternity men (higher r between ability and achievement for the former than for the latter). (5) Lowest withdrawal rate among freshmen was for those living in dormitories. (6) Dormitories and home were about equally conducive to academic achievement among freshman girls (none lived on their own in town). (7) No significant difference was found in academic achievement between freshman girls who had pledged sororities and those who had not.

STRAUB, JEAN S. A Study of Academic Advising at the University of Pennsyl-

vania. (Ed. D., 1956, University of Pennsylvania, Philadelphia.)

Director of study.—R. D. Matthews.

Problem.—To determine how satisfactory were practices currently used in academic advising of students in the College of Liberal Arts for Women at the University of Pennsylvania.

Procedures.—Intensive personal interview.

Major Findings.—A number of suggestions for improving academic advising.

THRUSH, R. S. Work Measurement Study of a University Counseling Service. (Ph. D., 1958, The Ohio State University, Columbus.)

Director of study.—H. B. Pepinsky.

Problem.—To determine how staff members of the University Counseling and Testing Center allocate their time during the workday, and how may this be measured reliably; to determine how counselors at the UCTC perceive particular aspects of their job.

Procedures.—Only the counseling and clerical staff of the UCTC were used for the work measurement study. Their work activities were categorized and work sampling was used to measure the percentage of time spent in each category. An experimental job period defined as 8 a.m. until 5 p.m., 5 days a week for 2 months, was used for the work-sampling observations. The data from these observations were analyzed for the total staff (counseling and clerical staff), the counseling staff, the clerical staff, and for individuals. At the end of the experimental job period each member of the counseling staff was asked to specify, from three different frames of reference (actual behavior, preferred behavior, and perception of the agency point of view); this allocation of time for the experimental job. Correlational techniques were used to test the hypothesis.

Major Findings.—The percentage of experimental job time spent by the entire staff, the counselors, the clerical staff, and individuals, in the various job categories can be found in R. S. Thrush's dissertation. The counselors as a group can describe certain work behaviors fairly accurately. Three of the counselors did not differ significantly from chance expectation in their descriptions. Even though some individual counselors could not accurately describe their past behavior, the counselors as a group could well describe their composite behavior.

TISDALE, NATHALIE S. An Evaluation of the Guidance Program at Keene Junior High School. (Master's, 1958, Keene Teachers College, Keene, N.H.)

Director of study.—Maynard C. Walts.

Problem.—To evaluate the effectiveness of the

present guidance system in the Keene Junior High School, after 5 years' operation.

Procedures.—Questionnaires sent to comparable junior high schools and to teachers in Keene Junior High School.

Major Findings.—(1) Ten items were found in which Keene Junior High School was strong, and six areas in which it was weak. (2) Teachers recommended five areas in which the guidance program could be improved.

TITENSOR, DORTHA YEAMAN. A Study of the Need for Personal Occupational and Educational Information Services in the Star Valley High School. (Master's, 1958, Utah State University, Logan.)

Director of study.—E. A. Jacobsen.

Problem.—In the three areas of information services (educational, occupational, and personal) to discover, compile, and interpret: (1) To what extent have the students felt the need for help in each of the three areas? (2) From whom did they seek and receive help? (3) To what extent do they want more help? Also, to discover how these problems vary in relationship to sex and how they vary among the freshman, sophomore, junior, and senior classes.

Procedures.—A two-page questionnaire was sent to 364 students, listing 15 problems to be checked as to whether the student encountered the problems, to whom he went for help, and whether he wanted more help and information. Five examples pertained to educational needs, four to occupational needs, and six to personal needs.

Major Findings.—Almost three-fourths of the students had encountered the problems indicated, 30.9 percent had received all the help they wanted, and 55.8 percent wanted more help in all three areas. Help was received from (in order) parents, friends, teacher, counselor, and principal. Personal needs were being met 3 percent better than occupational and educational needs (19.5 and 16.5 percent, respectively). Occupational needs were being met only about half as well as personal and educational. From comparison of boys and girls in all three areas, it was evident that the girls had needed more help, had received more help, and thus did not deserve more help as much as the boys. In the area of personal problems, all classes, except the freshman, were best fulfilled. Freshmen received most help on educational problems. For all classes, occupational needs were least fulfilled. A definite need for a more adequate and efficient guidance program to provide these areas of help is the major finding.

TY, EUFEMIA FORMENTO. A Proposed Program of Guidance Services for the Rural Schools of the Philippines. (Ed.

D., 1957. University of Colorado, Boulder.)

Director of study.—J. R. Little.

Problem.—To ascertain the opinions and attitudes of the selected guidance experts concerning general principles of organization and services essential to building up a good guidance program in rural schools.

Procedures.—The investigation was limited to selected counselor trainers and rural school guidance directors of the United States, including Hawaii and the Virgin Islands. The methods were (1) reviewing guidance literature; (2) reading related studies; (3) constructing the questionnaire; (4) sending the questionnaire to selected guidance experts; (5) asking for printed guidance materials from the respondents; (6) collecting, analyzing, and presenting the information gathered.

Major Findings.—(1) There were 12 general principles, chosen by the respondents, to guide those responsible for building up a good guidance program in rural schools. (2) The guidance experts gave counseling, individual appraisal, followup, research, and evaluation as the first services to be included in developing a good guidance program. Most of the rural guidance workers held the master's degree in guidance and personnel services and had teaching and other experience besides guidance work. The principal source of support for guidance services was the local district. The average number of years the guidance program had existed was 6.6. Forty-three percent of the schools had guidance consultants or specialists. Part-time counselors (teacher-counselors) were preferred over full-time counselors. The strongest reason given for this preference was that classroom contacts are of great value to counselors.

VOGEL, FRED J. A Study of Concepts and Practices Relating to the Allocation of Certain Student Personnel Responsibilities in Selected Institutions of Higher Learning in the U.S. (Ed. D., 1957, Florida State University, Tallahassee.)

Director of study.—Harold F. Cottingham.

Problem.—To seek evidence on (1) the scope of responsibilities student personnel administrators may expect; (2) what student personnel administrators believe their responsibilities to be; (3) some specific personnel practices or policies being employed to allocate responsibilities; and (4) what, in the opinion of the administrators, is the value of these practices to the total student program.

Procedures.—A checklist of responsibilities submitted to 104 coeducational, State-supported, 4-year institutions listed in the Directory of Higher Education as having a designated student personnel officer.

Major Findings.—Presidents and student personnel administrators are aware of the im-

plications involved in the "total student" philosophy. (2) Responsibilities allocated by administrators to the student personnel area, the acceptance of these responsibilities, and the practices employed by student personnel administrators in expediting them indicate a breach between awareness and application of the philosophy. (3) Student personnel administrators feel that sharp divisions are made on most campuses between academic, business, and personnel functions. Practices do not indicate substantial staff relationships. The majority of administrators expressed a desire to share in responsibilities not allocated to them, and believed that a number of policies and practices not presently employed would be valuable acquisitions for their program.

WALL, BARTHOLOMEW D. Some Attitudinal Differences Among Educational Specialists, Administrators, and Teachers. (Ed. D., 1958, Wayne State University, Detroit, Mich.)

Director of study.—William Evrauff.

Problem.—To assess the areas in which there might exist statistically significant differences in attitudes among educational specialists, administrators, and teachers.

Procedures.—Survey research; mail questionnaire followed up by personal interview of random-stratified sample; t-scores and analysis of variance. Overall design included development and use of an original scale. The usual validity and reliability checks were used in scale development. Areas of measurement: (1) attitudes toward one's professional role, (2) attitudes toward students, (3) attitudes toward one's professional peers, and (4) attitudes toward education as a community agency. The scale included measurements of consistency and flexibility.

Major Findings.—Educational specialists' scores were indicative of more flexibility, consistency, and more democratic, liberal, and progressive attitudes than the scores of administrators and teachers; the differences (t-scores and A.N.O.V.A.) were significant at the 1-percent level. The teachers' scores were most indicative of inflexibility, etc., being slightly higher than those of the administrators. The lower the score, the more flexible, democratic, liberal, and progressive. The higher the score, the more inflexible, authoritarian, conservative, and traditional.

WARD, GLEN J. A Descriptive Analysis of the Guidance Program at Weber County High School. (Master's, 1958, Utah State University, Logan.)

Director of study.—Basil Hansen.

Problem.—A descriptive analysis of the guidance program at Weber County high school and its work, in relation to determining

whether it is meeting the challenge placed before it.

Procedures.—An overall observance of conditions, utilizing experimental analysis of each aspect of the guidance program.

Major Findings.—There should be constant effort to improve overall efficiency by training, encouraging, and exploring the aptitudes, interests, abilities, and capacities of all secondary pupils enabling them to find their place in society. The limits in guidance should be only the limits of the particular students concerned. The work is directed toward the proposed goal, but must be constantly improved and changed as growth takes place.

WARMAN, ROY E. Differential Perceptions of the Counseling Role of a University Counseling Center. (Ph. D., 1958, The Ohio State University, Columbus.)

Director of study.—F. P. Robinson.

Problem.—To determine how various relevant campus groups (UCTC professional staff, other student personnel workers, teaching faculty, and students before and after counseling) perceived the counseling role of UCTC.

Procedures.—Data obtained from a questionnaire administered to 250 people during autumn quarter 1957, were factor-analyzed. The questionnaires were then scored on the obtained factors, and comparisons made among the five subject groups.

Major Findings.—In addition to a general factor that represents a generalized positive attitude toward counseling, three specific factors were obtained: College Routine, Vocational Choice, and Adjustment to Self and Others. Problems concerned with Vocational Choice are considered most appropriate for discussion at the Counseling Center. College routine problems were next in appropriateness, and problems of Adjustment to Self and Others least appropriate. This order held for all groups except the UCTC staff itself, which placed Adjustment to Self and Others before College Routine. The UCTC staff felt Adjustment to Self and Others to be appropriate for discussion to a significantly greater degree than did any of the other four groups. On all three factors, the UCTC group had the least within-group variability. Students after counseling had less within-group variability than before. For all groups, there was least within-group variability on the Vocational Choice factor.

WHITMORE, FAITH DOMCAS. Student Personnel and Guidance Services in Schools of Nursing. (Ed. D, 1957, University of Colorado, Boulder.)

Director of study.—Richard E. Fox.

Problem.—(1) To survey student personnel and guidance services in schools of nursing

in the United States which were fully accredited by the Accrediting Service of the National League for Nursing, as of February 1955; and (2) to set up a proposed plan for organization of guidance services in schools of nursing.

Procedures.—Findings were based primarily on (1) completed questionnaires returned by nurse leaders, and (2) opinions of authorities in the field of student personnel and guidance determined by a review of literature.

Major Findings.—Outstanding needs in student personnel and guidance services in schools of nursing centered about problems of staffing, inservice training, budgeting, and program planning and coordination. Other needs were for improvement of specialized services, placement, and research. Student personnel and guidance services were coordinated by the directors in 55 percent of the 126 schools studied, by a designated faculty member in 25 percent, and by others in 20 percent. Inservice training programs were available to all staff members in 22 percent of the schools, were not available in 27 percent, were available to guidance personnel only in 12 percent, were given only sporadically in 28 percent, and were current in 17 percent.

Thirty-seven percent of the schools reported funds were specifically allocated for student personnel and guidance services: 57 percent reported to the contrary. Individuals and agencies (other than school-of-nursing faculty, who contributed to student personnel and guidance services, reported by 50 percent or more of the schools) were limited to health nurses, physicians, social supervisors, psychiatrists, ministers, and librarians. Hospital schools especially needed better specialist services. Data indicated that 22 percent of the schools were for, and 43 percent against, assuming responsibility for placing students in part-time work. Forty-seven percent were for, and 34 percent against, assuming responsibility for placing graduate nurses.

WILLIAMS, H. EDGAR. The Guidance Attitude and Understanding of a Selected Group of Elementary School Teachers. (Ed. D., 1957, University of Colorado, Boulder.)

Director of study.—C. W. Fallor.

Problem.—To explore one aspect of the guidance role of elementary school teachers, their guidance attitudes, and understandings.

Procedures.—Interviews were conducted with 94 teachers in the suburbs of Denver. Using 15 guidance principles, recorded interviews were evaluated for agreement and understanding and analyzed for points of view. The influence of teaching proficiency, experience, and training were also examined.

Major Finding.—(1) The teachers agreed with guidance principles much more often than they understood them. (2) They accepted guidance as a responsibility, desired to increase guidance competence, and were willing to use expert assistance. These concepts, however, were not clearly understood by a majority of them. (3) They believed in encouraging, studying, and helping the individual child. They were confused concerning studying the child's past history, use of records, preparation for vocational choice and encouraging self-direction in children. (4) They favored cooperating with parents and participating in the total guidance program of the school, but some doubted the practicality of these practices. (5) Teaching proficiency was positively related to guidance understanding and attitudes, as were recency of training and courses in guidance and adolescent psychology. These teachers seemed ready for improvement in guidance understanding and skill and for assistance in meeting their guidance responsibilities.

WOOLF, LEE. A Comparison of Attitudes of Students and Staff Members in the Freshman Orientation Programs of Three Large Universities. (Ed. D., 1956, University of Florida, Gainesville.)

Director of study.—Leon N. Henderson.

Problem.—To determine relation of attitudes of students and staff members in the freshman orientation programs as regards amount of personal contact between the students and staff in the orientation program.

Procedures.—Ten-percent random sample of September 1955 freshmen, and 10 percent of staff members in the orientation program at the University of Florida, Florida State University, and University of Miami. Opinions obtained through personal interview and prepared questionnaires. Personal letter replies from 71 orientation directors of other colleges and universities of 5,000 student body or over. Data classified and percentages in different areas obtained.

Major Findings.—Closer agreement existed between evaluative judgments of students and orientation staff members when they had a great deal of personal contact than when they had little or no contact. Concepts of orientation differ and concrete meanings of terms should be classified. Orientation practices of large institutions follow practices in recent writings. Orientation schedule needs refinement. Most important elements desired by students are: (1) feeling that staff members are interested in them as individuals, (2) belief that there are people to whom they can go for counseling and to whom they can offer suggestions for improving orientation programs.

Vocational Development

BARNETT, JERRY and JEROLD GRIFFIS. Vocational Aspirations of the Ohio University Student Body. (Master's, 1958, Ohio University, Athens.)

Director of study.—George E. Hill.

Problem.—To determine the vocational aspirations of the 1957-58 Ohio University student body and their relationship to certain characteristics of the students (e.g., age, veteran status, parental occupations, parental education, population of home town, summer work, college point average, etc.). To provide data useful in planning university career days.

Procedures.—A stratified random sample, totaling 1,400, of the 7,000 undergraduate and graduate students of Ohio University was selected, representing them proportionately by sex, rank in college, and degree sought. Questionnaires were distributed to university housing units and mailed to off-campus students. A 68-percent return was achieved.

Major Findings.—(1) Teaching and engineering were the most common current goals. The percent of males interested in engineering decreased with rank in college; the percent of both males and females interested in teaching increased with rank. (2) College teaching was of little interest to undergraduates and was the choice of only 36 percent of the graduate women and 18 percent of the graduate men. (3) The mean salary expected on graduation was \$5,160 for males and \$3,890 for females. Salary expectations of a significant number of students were unrealistic. (4) High percentages of students reported having experienced vocational testing and counseling at both high school and university levels. (5) About one-third of both fathers and mothers had attended college. (6) Students with the most educational background in their families tended to have higher educational and vocational aspirations. (7) Most of the students were employed during the summer months. Over 94 percent planned to finish college. (8) Students reported work experience as the factor most influential in determining their career choices. Next (among more than 40 percent) was the influence of parents and high school teachers.

BENNETT, ANN CAROLYN. A Study of the Job Satisfaction of the Employed Deaf Adults in Utah. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—Cecil O. Samuelson.

Problem.—To investigate job satisfaction of employed deaf adults in Utah.

Procedures.—Through a questionnaire, 48 persons were selected who met the criteria for

the sample. The investigator administered two instruments to the subjects individually: the Brayfield Job Satisfaction Index, and the Pressey Senior Classification Test. The results of the Brayfield Job Satisfaction Index served as a basis for dividing the group into those "satisfied" with their jobs (the upper 25 percent) and those "dissatisfied" with their jobs (the corresponding lower 25 percent).

Major Findings.—(1) Few significant relationships were found among the variables when correlated separately. (2) The small size of the sample required that results be viewed as suggestive only. (3) Although differences between the "satisfied" and the "dissatisfied" groups were not significant, the "satisfied" had higher salaries, had become deaf a little later in life, had scored slightly higher on the verbal achievement, and had held fewer jobs prior to the one they held at the time of the study. (4) Nine of the 10 persons in the "dissatisfied" group, and only one in the "satisfied" group reported using lipreading on their jobs. (5) A majority of this sample were employed in manufacturing, communication, and personal services, such as packers, printers, welders, etc.

CANNON, DEORE J. The Concepts of Interest and Need Held by Two Occupational Groups. (Ph. D., 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To study the occupational stereotypes, as reflected by measures of Preference and Need, held by college men who had made various vocational commitments by reason of their choice of professional curricula. The subjects were students in the junior and senior years of the Texas Agricultural and Mechanical College at College Station, Tex., during the 1957-58 long session.

Procedures.—Two base groups of seniors who had been consistently in the Schools of Engineering and Business Administration were established. Three experimental groups were selected: (1) Consistent engineering students who had begun and continued in this field, (2) consistent business administration students who had begun and continued in this field, and (3) inconsistent business administration students who had begun in engineering but had changed curriculum. All five groups filled out the Kuder Preference Record (Vocational) and the Edwards Personal Preference schedule with standard directions. The consistent engineering group and the consistent business administration students wrote responses which they thought would characterize the typical engineer and business administrative business graduate, respectively. Inconsistent students wrote responses for both typical engineers and typical business graduates. The principal statistics used were Pearson r , analysis of variance, Coefficient of

Profile Similarity, the Cochran and Cox t test and t test for mean differences.

Major Findings.—(1) The measure of preference (Kuder) produced much sharper differentiation between unstructured responses of students in the two major fields than did the measure of manifest needs (Edwards). (2) The business groups were characterized by high scores on the Persuasive and Clerical scales, in contrast to engineering students who made high scores on the Mechanical and Scientific scales. (3) Projections by business students tended to overemphasize the logically related areas. The projection by engineering students overemphasized the clerical preference and underemphasized the Outdoor and Social Service Preferences, in comparison with the Base Group. (4) The patterns of both Consistent and Inconsistent Business groups strongly resembled that of the Business Base Group. (5) The Engineering and Business Base groups did not differ significantly as to any PPS score. Manifest needs were more active in the projections of students, but were often not in line with their targets.

DARLING, HAROLD WILLIAM. A Comparative Study of Persisting and Nonpersisting Ministerial Candidates in Evangelical Colleges. (Ph. D., 1958, Purdue University, Lafayette, Ind.)

Director of study.—Elizabeth K. Willson.

Problem.—To determine, in evangelical colleges, whether persisting ministerial candidates could be differentiated from nonpersisting candidates in the following respects: earlier initial consideration of the ministry, more frequently "called" to the ministry, higher intelligence, more altruistic in their motivation, more frequent coincidental first consideration and final decision to enter the ministry, and significantly higher scores on one or more traits of the Guilford-Zimmerman Temperament Survey.

Procedures.—Questionnaires were sent to 383 ministerial candidates who had enrolled as freshmen in the fall of 1952 in 15 4-year colleges, four 2-year colleges, and four Bible colleges of evangelical persuasion. Completed questionnaires were received from 229 persisting, 28 nonpersisting, and 8 unclassified candidates. Percentiles on psychological tests were obtained from college officials for 89.5 percent of the total group. Of the Guilford-Zimmerman Temperament Surveys, approximately 70.5 percent were completed and returned.

Major Findings.—The small number, 28, of nonpersisting respondents made extensive statistical analysis impossible. A greater proportion of persisting candidates seemed to have a "call" to the ministry, and they achieved higher scores on Guilford-Zimmerman Temperament Survey on the traits of Thoughtfulness, General Activity, Restraint, Ascendancy, Sociability, Emotional Stability.

Objectivity, and Friendliness. Candidates giving first consideration to the ministry before the age of 18 or after 25 tended to persist in ministerial training. Of the persisting candidates, 28.6 percent and of the nonpersisting, 6.3 percent made final decision for the ministry while in college. Persisting candidates as a total group more frequently made initial and final consideration for ministry within same year.

DOLE, ARTHUR A. and CAROLINE F. WILL. Survey of University of Hawaii 1958 Seniors. (1958, University of Hawaii, Honolulu.)

Director of study.—Arthur A. Dole.

Problem.—To determine University of Hawaii seniors' educational and/or work plans after graduation, and the factors which influenced their choice of field of study.

Procedures.—As a part of the spring registration process 650 questionnaires were administered, collected, and checked for accuracy. Percentages were computed for the following: (1) Sex and college, (2) plans within 6 months after graduation, (3) need for further assistance in job hunting or in planning careers, (4) factors influencing choice of undergraduate major or curriculum.

Major Findings.—(1) Out of every 10 seniors, 4 planned to look for a full-time job within 6 months after graduation; 2 planned more education, 1 hoped to get a graduate assistantship or internship, 1 planned military service, and 2 planned a part-time job, were not sure, or had other plans. These proportions have been stable since 1955. (2) Two-thirds of the seniors indicated that a factor in selecting their majors or curricula was satisfaction from the field, or interest. This proportion is more than twice the number that indicated security of employment as a motive.

DONOHUE, FLORENCE M. Occupational Choices of Secondary School Students, James Hillhouse High School, New Haven, Conn., 1957-58.

Director of study.—Florence M. Donohue.

Problem.—To answer the following questions: (1) Are students realistic in their occupational planning? (2) Do students recognize the difference between their occupational aspirations and their occupational plans? (3) Does the educational level of the parent have a significant bearing on the occupational plan of the student? (4) How do the students' occupational plans relate to the occupational pattern of the area? (5) Does the current news media emphasis on science have significant effect on the students' value concepts of various occupations?

Procedures.—A questionnaire was administered to 118 boys and 195 girls in the 11th-grade group guidance periods of the James

Hillhouse High School, New Haven, Conn. This sample of 308 students represented the distribution of boys and girls in the entire class as well as in the 8 courses of study offered by the school. These students were completing both a year of weekly, regularly scheduled group meetings, in which the major area of discussion was occupations, and a series of group conferences (49) led by specialists in the occupations selected by the students as of special interest.

Major Findings.—(1) Most students are realistic in their occupational planning. (2) Many do recognize the difference between their occupational aspirations and their occupational plans. (3) The educational level of the parent does have a significant bearing on the occupational plan of the student. (4) Students' occupational plans do not follow the occupational pattern of the area. (5) Apparently the current news media emphasis on science confirms the students' value concept of science as a contribution to the health and welfare of mankind, with almost no evidence of recognition of the value of the destructive elements of scientific endeavor.

DUFF, FRANKLIN LEROY. Appropriateness of High School Seniors' Occupational Choices. (Master's, 1957, Miami University, Oxford, Ohio.)

Director of study.—R. W. Edmiston.

Problem.—Analysis of interest adjustments, capacities, and achievements of high school seniors, and the requirements of these factors according to their chosen occupations.

Procedures.—The chosen student occupations plus number of choices were as follows: secretarial-stenographic—64; general clerical—64; engineering—49; teaching—45; nursing—36; mechanical—32; tool and die work—30; scientific-professional—25; artistic—25; service occupations—16. In each case CR's were determined between the norms for the group and norms for the factors of interests, adjustments, capacities, and achievements considered.

Major Findings.—The patterns of the groups did not digress greatly from the required patterns of the various occupations. The students did not always consider the requirements for occupational success in high level vocations, which indicated a weakness in vocational guidance. The specific factors which need more consideration from the various groups were indicated.

FORMICA, LOUIS. A Comparative Study of Selected Factors in the Vocational Development of Intellectually Superior College Girls from the Working and Upper-Class Levels. (Ph. D., 1958, University of Connecticut, Storrs.)

Director of study.—Edward A. Wines.

Problem.—To determine the role of socioeconomic status in the vocational development of intellectually superior junior and senior college areas, marriage and career orientations, job security, job prestige and status, the emergency and persistence of occupational preferences, and key figure influences.

Procedures.—Fifty-six girls drawn from three New England colleges made up the total sample. A basic sample of 15 upperclass and 13 working-class girls was drawn from one of the schools; a replicate sample of the upperclass from the second school, and of the working class from the third school. (1) Each subject participated individually in an electrically recorded structured interview, and completed the Mooney Problem Check List and the Strong Vocational Interest Blank for Women. (2) Chi-square tests of significance were applied to the data from the Mooney List. (3) The Strong Blank data used consisted of A and B+ scores on the occupational scales with positive and negative male-association factor loadings. Chi-square tests of significance were applied to test for differences. (4) The recorded interview data were analyzed and pertinent materials were extracted and compiled into case summaries. The objectivity of the results was determined by the use of a second and third party. (5) The case summaries were presented to five judges for rating. (6) The median of the average ranks was found for each of the six factors under study. Chi-square tests of significance were applied to test the differences in the number of girls from each social class group whose average ranks fell above and below the median.

Major Findings.—Significantly, working-class girls had more problems in finance, living conditions, and employment; and had measured interests in more career-oriented occupations. Also significantly, upperclass girls had measured interests in more marriage-oriented occupations and they were more influenced by intrafamily key figures. No significant differences were found between the two class samples in the emphasis placed on job prestige and status.

FORTSON, MILDREN G. A Comparison of the Measured and Self-Estimated Vocational Interests of Boys and Girls in the Eighth Grade. (Master's, 1958, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate the reliability of scores on the California Occupational Interest Inventory used with students in the 8th grade, and the effect upon self-estimates of interest exerted by having the scores interpreted. Subjects were 55 males and 57 females in the 8th grade at Mirabeau B. Lamar Junior High School in Austin, Tex., during the school year 1957-58.

Procedures.—A self-estimate form, patterned after a form developed by S. L. Walch in his doctoral research at the University of Texas, was developed for the six Field scales of the Occupational Interest Inventory. About 2 weeks after prior-estimates, the students took the OII and made estimates again. A short time later, the OII was given a second time. Self-estimates followed, and later the students were given a group test interpretation of their first OII scores. A final set of self-estimates was then obtained. The principal statistics used were *t* and *F* tests, Pearson *r*, Fisher *z*, chi square, and contingency coefficient.

Major Findings.—(1) T-retest reliability coefficients for the six Field scores of the OII ranged from .59 (male Personal-Social) to .86 (male Science and female Arts). The mean Field coefficient was .69 for males and .82 for females. The mean Type coefficient for males was .61, while that for females was .75. The Level coefficient was .42 with males and .50 with females. (2) The subjects tended to cling to their original estimates of interest. Accuracy of Estimation and Direction of Error were not greatly affected by either the taking of the OII or the interpretation of its results. The single exception was the Science scale. (3) Male students tended to overestimate the male-biased scores (Natural, Mechanical, and Science), while female students tended to overestimate the Arts score. Both groups underestimated the Personal-Social interest, but males erred more than females, and both were about equal in a mild underestimation of interest in the business fields. (4) It appears that change in self-perception is not produced by testing and interpretation at the 8th-grade level.

HENDERSON, ERWIN C. The Kuder Preference Record-Vocational in Appraising the Apparent Suitability of Vocational Choice of High School Students. (Master's, 1956, Utah State University, Logan.)

Director of study.—E. A. Jacobsen.

Problem.—To determine whether giving the Kuder Preference Record-Vocational Test to all the students of two small rural high schools and discussing its results in groups benefited the students.

Procedures.—In order to refine methods and define objectives, a pilot study was made with 21 high school seniors. First, a letter encouraging student cooperation, and a questionnaire seeking occupational likes and dislikes of the students as well as their further educational plans, were distributed. Following collection of this first questionnaire, the students were asked to choose from a description of Kuder's fields of interest the three fields they liked most and the three they liked least, and to tell why. Next, the Kuder Pref-

erence Record-Vocational Form CH was given to the students and, following a discussion of their test results, another questionnaire, which sought their vocational choices and educational plans. Vocational choices made before the test were compared with those made after discussing the Kuder profiles. The students' self-ratings of their interest in the Kuder fields of interest were correlated with the interest profiles. Final vocational choices, which were rated as "apparently satisfactory" or "probably satisfactory" in comparison with the students' Kuder profile were summarized.

Major Findings.—(1) The figure of probably satisfactory vocational choices for interest profiles increased from 75 percent before their profiles were discussed to 81 percent after they were discussed. (2) Correlations of Kuder ratings of interest with self-rating of interest of about median .40 for fields and .54 for profiles were found. (3) Apparently or probably satisfactory vocational choices included secretaries, 32 percent; mechanics, 14 percent; farmers, 13 percent; and engineers, nurses, and teachers, each about 5 percent.

HOWES, VIRGIL. A Survey of 6,500 Senior High School Students' Vocational Interests and Opinions. (1958, Office of the Superintendent of Schools, San Diego County, San Diego, Calif.)

Problem.—To identify students' vocational interests and to discover their opinions about their vocational education experiences in high school.

Procedures.—A forced choice questionnaire was administered to 6,657 students in grades 10, 11, and 12 in San Diego County high schools, usually through the social studies departments. Answers to selected items from a random sample of 500 questionnaires were compared with answers to the same items for the total population to check the adequacy of the sample. Data were analyzed by grade level, by average academic achievement as shown by grades, by sex, by major occupational choice, or by a combination of these factors.

Major Findings.—(1) A majority (96.4 percent) of the students made an occupational choice. (2) Over 89 percent chose professional or managerial occupations, while U.S. employment figures showed less than 20 percent gainfully employed in this area. (3) Corresponding figures for service occupations were 17 percent for student choices and 31 percent for gainfully employed. (4) Liking for a particular school subject was the chief factor influencing students' vocational choices. Conversely, the least influential factor was the difficulty of the school subject. (5) More than 70 percent of the students felt their high school programs would help them in their chosen occupations. (6) Other findings were in the areas of "subjects most liked and

least liked," "subjects felt to be most helpful in chosen occupations," and in student feelings about the adequacy of their information on their chosen occupations.

KEININGER, GERTRUDE L. Stability of Vocational Interests of Students in a Selected High School. (Master's, 1958, University of Cincinnati, Ohio.)

Director of study.—Worth R. Jones.

Problem.—To determine the stability of students' interests in a selected Ohio high school, as indicated by the Kuder Preference Record, Form BB.

Procedures.—Form BB was administered to sophomore students of the class of 1955 and readministered to the same students 24 months later. Self-scoring was employed to create greater interest and stability of interests was determined by correlational procedures.

Major Findings.—(1) A high stability of interests was indicated. (2) The Artistic scale was the most stable for both sexes. Social Service was the least stable for the females, and Computational for the males. Males in general had a higher stability of interests than did the females. (3) Group interests were most stable in the Mechanical and Artistic preferences. Least stable were Persuasive and Computational scales.

KOEDAM, SADIE ANNEA. An Appraisal of the Testing and Counseling of Seventeen Eighth-Grade Students, Englewood Cliffs, New Jersey, Spring 1956. (Master's, 1957, Montclair State Teachers College, Upper Montclair, N.J.)

Director of study.—Orpha M. L. Lutz.

Problem.—To assist 17 8th-grade students, on the basis of a testing program and limited case studies, to make a wise selection of courses in the 9th grade, to advise them of the bearing of their selections on tentative vocational choice, and to appraise tentatively the results of such counseling.

Procedures.—After information was gathered from school records about each of the nine boys and eight girls, selected standardized tests were administered. Conferences were held with each student and his parents to explain the significance of the data gathered about the individual in relation to (1) choice of course of study in high school, (2) probable future success in the area of the student's tentative vocational choice, and (3) the student's possible success during and after high school.

Major Findings.—The pupil-teacher relationship, the testing program, and the counseling of the 17 pupils were apparently satisfying and successful in the opinion of the students. This was not true with all the parents involved. Some parents were completely ignorant of the importance of the decision to be

made, were unwilling to give the time necessary for a conference, and tried to force their own ambitions on their children. The conferences indicated that the role of parents in educational counseling of 8th-graders cannot be overemphasized. On the basis of the investigation, it would seem advisable to present general information about college requirements in the 8th grade.

MORRISON, RICHARD L. Statistical and Prestige Factors in Making Occupational Decisions. (Ed. D., 1967, University of California, Berkeley.)

Director of study.—Clifford P. Froehlich.

Problems.—To identify status and prestige factors in persons making an occupational decision.

Procedures.—The study covered 238 students identified as either entering or leaving the teacher-education program during 1956-57. Questionnaires contained several scales, i.e., occupational attitudes rating scale, status scale from Gouch's Self-Descriptive Adjective Check List, occupational rating scale (authors), and socioeconomic data regarding background and expectations.

Major Findings.—Men leaving education (abandoning teaching) were found to be from higher socioeconomic backgrounds than men entering teaching (tentatively significant), and to be expecting to enter occupations of higher prestige and income (in their own estimation) than was expected by those entering teaching. Both men and women leaving teaching rated teaching as of significantly less prestige than did those entering teaching. Status factors are present in the occupational choice process to a measurable degree, and measures of socioeconomic background and of the perceptions of the prestige of occupations may be potentially useful tools in vocational guidance.

NELSON, RICHARD C. Changes in Parents' Estimates of Their Children's Vocational Interests. (Master's, 1958, Ohio University, Athens.)

Director of study.—George E. Hill.

Problem.—To determine to what extent and for what reasons parents changed their estimates of their 10th-grade children's vocational interests over a 2-year period. This is a followup of Hole's 1956 study of 40 10th-graders, the current study being done during the students' 12th year in school.

Procedures.—Twenty boys and girls in the 12th grade who had taken the Kuder Preference record in the 10th grade, and whose parents had taken the Kuder at that time, were reinterviewed and asked to express their current interests on a modified card-sort adaptation of the Kuder. Their parents were also interviewed, as to their current (12th grade) estimates of their children's vocational in-

terests, and their reasons for changing estimates made at the 10th-grade level.

Major Findings.—(1) In the 12th grade, parents matched 68 percent, or 10 percent more, of their children's top three Kuder interest areas, as compared to the 10th-grade estimates. (2) Mothers improved in these matchings slightly more than fathers. As in the 10th grade, parents matched their daughters' interests better than their sons'. The improvement in estimates of interests was greater for the sons than for the daughters. (3) Girls' interests were most frequently matched in the artistic, literary, and social service areas (by 75 percent or more of the parents) in 12th grade. Boys' interests were matched as frequently in 12th grade in the outdoor area only. (4) In the 12th grade, parents matched their children's college intentions in 94 percent of the cases. (5) Home understanding and socioeconomic level appear to bear a definite relationship to the accuracy of parental estimates of their children's vocational interests. The matching of estimates was greater when the children felt understood. Whether the parent, reported understanding the child bore no relationship to the matching of interest estimates.

O'TEEL, ANNE ELIZABETH. Critical Evaluation of Career Fiction for Use in Bibliotherapy. Master's, 1958, St. Bonaventure University, St. Bonaventure, N.Y.)

Director of study.—Gerard Hinrichs.

Problem.—To determine, so far as the literature permits, the potential of bibliotherapy for aiding personal and vocational adjustment in high school students, and to demonstrate the selection and evaluation of some two dozen career stories, most of which illustrate that potential, using criteria and procedures available to a school counselor.

Procedures.—Surveying and summarizing present opinion concerning the promise of bibliotherapy in the field, studying applying criteria derived therefrom, and studying student reactions to a small but fairly representative section of career stories for high school girls.

Major Findings.—Many of the career stories being written for high school girls today could be used for aiding their personal and vocational adjustment. Stories whose primary purpose is telling about an occupation, and whose plot tends to be contrived, vary from one publisher's series to another in work experience of the writers, detail of job requirements, newness of vocational areas, etc. Others skillfully present the vocational information in the proper perspective to plot action. Supplementary vocational materials from the counselor's file are needed to fill the void when a story's emphasis is on preparation for a vocation at the expense of job ex-

periences, and vice versa. Working cooperatively, the school librarian and school counselor can select and evaluate useful vocational fiction, using the published criteria outlined and student reactions.

RILEY, RUSSELL H. *Interests and Choice of Teaching Fields.* (Master's, 1937, Illinois State Normal University, Normal.)

Director of study.—Stanley S. Marzoff.

Problem.—How do students enrolled in various curricular fields in teacher education differ in their responses to the Kuder Vocational?

Procedures.—Scores of all students who entered Illinois State Normal University in 1933, for whom complete data were available, were studied. Only those curriculums enrolling a sizable number of students were used and composite profiles for these were made. Attention was paid to the median interest score and also the range of scores.

Major Findings.—In general, the findings conformed to expectations that those in business education are highest in clerical interest. In each curriculum some students have little of the interest important to that field. Some curricula attract students with high social service interest, while other curricula attract those with specific subject matter interests only.

ROTHERMEL, PATRICIA A. *A Study of the Skill and Knowledge Requirements of Clerical Workers in the Oceanside-Carlsbad Area.* (Master's, 1958, San Diego State College, Calif.)

Director of study.—Maurice Crawford.

Problem.—To determine the knowledges, skills, and attitudes which employers consider essential for successful clerical performance in the area concerned.

Procedures.—Literature was studied concerning duties performed frequently by clerical workers. Ten employers were interviewed. Questionnaires were sent to owners or managers of 100 business firms in the area.

Major Findings.—About 10 percent of the clerical workers were part time. Forty percent of the firms hired part-time workers. About 40 percent tested the applicants and 45 percent did not. Nearly one-half did not require a minimum speed in typing or shorthand. Important knowledges were: planning the day's work for oneself, preparing receipts, keeping cash records, applying principles of filing, and keeping a neat office. Important subject matter were: spelling, basic arithmetic, analytical ability, and English. It was recommended that clerical training be expanded in the area, students be given an opportunity to develop the necessary knowledges, skills, and attitudes.

SCHNEBELT, MARY PARACLYTA *Vocational and Womanhood Concepts of the High School Girl and Her Understanding of Their Relationships.* (Master's, 1958, Marquette University, Milwaukee, Wis.)

Director of study.—John P. Treacy.

Problem.—To investigate concepts of vocation and religious vocation among school girls and religious of the last 10 years.

Procedures.—Questionnaire sent to girls who entered high school in last 10 years. Sample of 12 high schools in Metropolitan Milwaukee selected to represent various economic levels, coeducational and single-sex schools, also religious girls in the community. Analysis was by simple comparison of frequencies and percentages. 264 young religious and 446 other high school girls.

Major Findings.—An inadequate and poor understanding of obligations of womanhood and for understanding of such obligations and suggestions as to ways in which promotion of related concepts would be helpful.

WARREN, PHYLLIS ANN. *Vocational Interests and the Occupational Adjustment of College Women.* (Ph. D., University of California, Berkeley.)

Director of study.—Lawrence H. Stebbins.

Problem.—To investigate the dynamic choice of mode of occupational adjustment of college women; to study some of the relationships existing between occupational status and stated goal undergraduate study, and academic achievement; to study the relation between quality of vocational adjustment and inventoried interests, expressed interests, academic achievement, and choice of occupational role.

Procedures.—The subjects were drawn from alumnae receiving bachelor's degrees in the years 1945-49 from a privately endowed denominational, liberal arts college for women located in California. The Strong Vocational Interest Blank for Women was employed as the measure of occupational interest. Quality of occupational adjustment was measured by a job satisfaction scale and a marital satisfaction scale. The data were collected by means of a mailed questionnaire and undergraduate records.

Major Findings.—When college women were grouped according to their present vocational roles, the Strong Blank did differ among them. Further, those who had vocational interests consonant with their present roles tended to gain greater satisfaction from their work (with the notable exception of housewives who were homemakers only) than did those whose interests did not so correspond. Housewives who had outside activities

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teer or remunerative, enjoyed higher marital satisfaction than did those who devoted full time to homemaking. Alumnae whose measured interests conformed with their present occupations also tended to be more satisfied than those whose interests did not so conform. The women whose college majors were closely related to their present occupations had higher job satisfaction scores than did those whose college majors and present occupations were not so related. There was no significant difference, between the alumnae who had additional training past the bachelor's degree and those who had none, on the F-M scale of the Strong Blank. Among married alumnae, the homemakers only had the lower F-M scores; those engaged in additional occupations received higher scores. Academic achievement appeared unrelated to consequence of interests with present occupation, with college major, or with stated vocational goal. However, those college women whose interests conformed with their present occupations had stated vocational goals as freshmen and had selected major fields of study consonant with their measured interests.

WHITE, BECKY JANE. The Relationship of Self-Concept and Parental Identification to Women's Vocational Interests. (Ph. D., 1957, University of California, Berkeley.)

Director of study.—L. H. Stewart.

Problem.—To investigate the relationships of self-concept and parental identification to junior college women's vocational interests and choices. Differences between subjects whose interests were of a career nature and those whose interests followed a typically feminine pattern were interpreted in terms of relationship of cultural role to self-concept.

Procedures.—Self-concept and parental identification were studied with the Q technique. Each subject sorted 75 statements in three ways: to describe herself, to describe her ideal self, and to describe the person she thinks her parents would like her to be. Parents sorted the statements to describe the girl as they saw her and to describe the ideal daughter. The girl and each parent completed data sheets with information about family backgrounds and the girl's vocational plans. The girls also completed the Strong Vocational Interest Blank for Women.

Major Findings.—Comparisons of Q sorts indicated the mother as the parent with whom the girl was more closely identified. This might be interpreted in terms of the mother's transmitting the culturally prescribed feminine role. Some differences in self-concept seemed related to the degree to which the girl adhered to the traditionally feminine role. Girls whose Strong Blank scores indicated highly feminine interests and interest patterns in stopgap occupations were considered to be more accepting of the feminine role than were

girls who showed low FM scores and career interests. Girls adhering to traditional patterns tended to be more closely identified with their parents and to be from homes in which both parents were living, or where there was clear communication between the girl and her parents. Girls with career motivation tended to come from homes in which the male parent was deceased, or where there was less communication between the girl and her parents.

Miscellaneous

AIKENS, LINCOLN. Montana System: An Experiment in Integrated Higher Education. (Ed. D., 1958, Montana State College, Bozeman.)

Director of study.—James F. Nickerson and Merrill Barilagame.

Problem.—To present a systematic study of the establishment and development of the University of Montana system of higher education, and its major characteristics and problems. To give a broad outline and overview of the university system.

Procedures.—*Historical Method:* Source material—official minutes of the Board of Education and the Executive Council of the university, fragmented reports and statements in files of executive secretary of the university, documents in the State Historical Library, newspapers of the period, House and Senate Journal, session laws, annual catalogs, president's reports, and the like.

Major Findings.—At the time of its inception, the University of Montana was a unique institution of higher education because of fully autonomous freedom for each of the separate units within a framework of integrated administrative control under a chancellor. The original plan for a university system of integrated administrative control broke down under the exigencies of practical politics. A revised plan operating without a chancellor and with fairly direct control by the State Board of Education through the executive secretary is now being tested.

ALLEN, C. KAY. An Analysis of Teaching Attitudes Toward Merit Rating. (Master's, 1957, University of Utah, Salt Lake City.)

Director of study.—F. B. Jex.

Problem.—To determine the opinions and attitudes of teachers in one of Utah's larger school districts toward some basic problems of teacher merit rating.

Procedures.—A questionnaire developed by the writer was completed in interviews, according to a carefully structured set of directions.

with 28 teachers, or 89 percent of the teachers in the district. Expressions of their attitudes toward merit rating were solicited, and the data were analyzed and compared by standard statistical procedures.

Major Findings.—Teachers expressed a consistent concern about merit rating—they were fearful that no rating system would be fair to them. No one person was believed capable of rating the quality of work performed by the teacher and there was little agreement concerning what constitutes good teaching. Davis County teachers, however, tended to look upon teacher merit rating as being both psychologically and philosophically sound. They also recognized that substantial differences do exist in teaching ability. Two out of three teachers interviewed believed that a merit rating plan would hurt the morale of most teachers. Of the teachers interviewed, only 29 percent were willing to have merit employed as a determinant of salary.

ANTHONY, GEORGE EARL. A Survey of Selected Recreational Facilities in San Diego for Young People Disabled With Cerebral Palsy or Poliomyelitis. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Clifford D. Foster.

Problem.—(1) To survey selected organizations typical of agencies serving youth in the San Diego area, in order to determine recreational and socializing opportunities for young people ranging in age from 11 to 18, who were handicapped by cerebral palsy or residual poliomyelitis; (2) to determine the most desirable kinds of facilities for the recreation of these young people; and (3) to ascertain which of the facilities were most essential.

Procedures.—Survey of selected agencies in the San Diego area that served the recreational needs of both the nonhandicapped and the handicapped, with major consideration to four agencies that served only the handicapped. Data from an earlier survey by two agencies which primarily served the nonhandicapped, but which also provided recreational facilities for the disabled, were also included. To supplement this research, interviews were conducted with parents of the 20 young people in the study who were disabled by cerebral palsy or residual poliomyelitis.

Major Findings.—There is a need to study the means for an effective centralized control and coordination among agencies that serve the handicapped in San Diego. Transportation presented a major problem to agencies that offer recreational services to handicapped.

BAGLEY, CLARENCE H. A Survey and Outline of Factors in the Reading

Process, With Emphasis on College Reading. (Master's, 1958, Utah State University of Agriculture and Applied Science, Logan.)

Director of study.—David R. Stone.

Problem.—To survey the factors related to the reading process and their implications for teaching. Further analysis was also made of word recognition and comprehension.

Procedures.—A documentary study and pre-survey of reading manuals, textbooks, and periodical literature to note all factors of reading.

Major Findings.—General indications are that reading is a complex process. Measurement is not adequate but significant strides are being made. The most widely used major divisions of reading analysis are word recognition and comprehension. Factors related to reading, but not part of the process as emphasized by authorities, were cited as: speed of reading, the reader and his background, study habits and skills, physical conditions, and the book itself. Perception is being used to describe the first stage of word recognition. The factor of speed of reading has significance only when related to "Speed of What." Vagueness and generalities are still characteristic of the terminology used to describe reading.

BAYLES, JANET CROWLEY. Parental Cooperation in Elementary Special Classes for Mentally Retarded Children. (Master's, 1957, San Diego State College, Calif.)

Director of study.—Evans L. Anderson.

Problem.—(1) To ascertain the types and degree of parent participation in San Diego's elementary special classes for mentally retarded children during the school year 1956-57. (2) To explore the relationship of parental attitudes to differences in economic and cultural backgrounds.

Procedures.—Preliminary interviews were conducted with 10 selected special class teachers to obtain information to be incorporated into a questionnaire, which was sent to five special class teachers in each of three districts in the city, varying in national and racial backgrounds. The following information about each child in the class was requested from the 15 teachers: personal data, family relationship, parental data, parents' attitudes, and the type of participation during the year. The findings were tabulated and recorded in frequency and percentage tables.

Major Findings.—The amount of cooperation actually recorded did not compare favorably with the number of parents rated as willing to participate in the program. Attitudes toward participation improved when the economic status increased and the racial and

national variability decreased. Although interested, most parents did not realize the importance of maintaining close home-school relations.

BRENNAN, EDWARD. An Investigation of the Hearing Status of Children Following Tonsillectomy and Adenoidectomy. (Master's, 1958, Sacramento State College, Calif.)

Director of study.—Maryjane Rees.

Problem.—To determine the amount of hearing recovery in school-age children with hearing impairment for whom tonsillectomy and adenoidectomy had been recommended and accomplished; and further, to determine whether recovery was greater at some frequencies than at others.

Procedures.—Records of children seen in the Sacramento Otological Clinic, from September 1956 to May 1958, who were from schools serviced by the office of the county superintendent of schools. Audiograms of 138 children for whom surgical procedure was recommended were found, and 25 from this group for whom surgery had been carried out were retested. From the data, differences in better-ear average were determined. Amount of hearing recovery at each frequency tested was analyzed by the technique of analysis of variance. The data were also analyzed by the techniques of analysis of invariance in a frequencies-by-ear design.

Major Findings.—(1) The level of better-ear average hearing was significantly improved at the time of the followup test. (2) There was no difference in the amount of functional hearing recovery for right and left ears. (3) The greatest amount of recovery in hearing occurred at 8,000 c.p.s., the next greatest amount at 1,000 c.p.s., and at other frequencies, small. (4) Eliminating ears with hearing not meeting usual medical referral criteria for hearing loss did not affect the trend of the data.

CHASE, RICHARD C. An Analysis of the Effects of Automation on Music and Implications for Counseling. (Master's, 1958, University of Utah, Salt Lake City.)

Director of study.—Reed M. Merrill.

Problem.—Looking at automation as related to music to see what problems are arising, and to discover how far the findings support the hypotheses concerning the consequences of automation to the individual and to the group.

Procedure.—The principal source of information was library research, including a questionnaire given to members of the Utah Symphony Orchestra.

Major Findings.—The hypothesis, borne out by the data, is that the effects of automation on musicians are adverse. Although automation probably is responsible in part for in-

creased interest and appreciation of music, there is very little to indicate, at this time, that the contrary hypothesis, which views automation as a "blessing," can be true. In short, automation poses a serious threat to creativity.

DAILY, RALPH J. How Akron Teachers Provide for Individual Differences in Arithmetic. (Master's, 1957, The University of Akron, Ohio.)

Director of study.—Hjalmer W. Distad.

Problem.—To find what the middle-grade teachers of Akron, Ohio, are doing to provide for individual differences among their pupils in the area of arithmetic. The author desired answers to the following questions: (1) What types of classroom organizations are used in teaching arithmetic? (2) What specific techniques are used to provide for individual differences in arithmetic? (3) What are the greatest hindrances in an attempt to provide for these differences?

Procedures.—A questionnaire, sent to approximately one-half of all the middle-grade teachers in the Akron public schools, contained three basic parts: (1) classroom organization for instruction, (2) differentiated instruction, and (3) miscellaneous information.

Major Findings.—A total of 90 questionnaires, or 48.4 percent, were returned—a sampling of approximately one-fourth of all the middle-grade teachers. The information gathered indicated: (1) A traditional type of classroom organization is used in most phases of arithmetic instruction, and differentiated instruction is most used during the diagnostic and remedial phases of instruction. (2) More simplified and concrete methods and materials are used with the slow learners, while more complex and abstract methods and materials are used with the faster learners. (3) Class size and lack of time were mentioned by most teachers as the greatest hindrances to provide for the individual needs of their pupils in arithmetic.

GILLIS, JOHN WILLIAM. The Attitudes of Purdue Engineering Alumni, Faculty, and Students Toward the Goals of General Education. (Ph. D., 1958, Purdue University, Lafayette, Ind.)

Director of study.—Lee E. Isaacson.

Problem.—To determine whether four engineering groups—alumni, faculty, seniors, and freshmen—differed in attitudes, ranking, and relative position of 26 possible goals of college education, 16 of which were concerned with general education and 10 with specific education.

Procedures.—One group of 2,799 engineering alumni were selected by a stratified random sampling of all Purdue engineers graduating from 1911–56. The second group consisted of

all 178 engineering faculty members employed at Purdue at time of the study, and the third group of all 217 engineering seniors at Purdue at that time. The fourth group of 246 engineering freshmen was selected by random sample of those engineering freshmen then at Purdue. The alumni and seniors were asked to what extent they had achieved the 26 goals in college; the faculty, to what extent they believed their students achieved them; and the freshmen, to what extent they expected to achieve them.

Major Findings.—The four groups differed significantly for 20 of the 26 goals and as to attitude toward achievement. Although positive correlations were obtained for the rankings on importance and achievement of the specialized goals for the alumni, seniors, and freshmen, they were not significant at the 5-percent level. Degree area and scholarship of alumni were not generally related to attitude toward educational goals. Functional job responsibility, year of graduation, and socioeconomic background appeared to relate to attitudes toward educational goals. The attitudes of the alumni did not form unilateral scales.

GRIFFITH, PAUL L. Type of Residence as a Factor in Academic Achievement at the State University of Iowa. (Ph. D., 1958, State University of Iowa, Iowa City.)

Director of study.—Kenneth B. Hoyt.

Problem.—To investigate the effect of type of residence upon academic achievement at the State University of Iowa.

Procedures.—The subjects were 514 men and 293 women who had enrolled as freshmen in 1953 and progressed at a normal rate. Experimental groups for each school year and for the 4-year period were constituted according to the type of residence occupied. The housing categories were residence halls, fraternities or sororities, roominghouses, homes, married, and changing housing. Criterion measures were university grade-point averages. Following an inspection of intercorrelations and application of multiple regression procedures involving several proposed control variables, only high school grade-point average and percentile rank on placement tests were retained for use in the multiple analysis of covariance. By the technique of multiple regression the groups were, in effect, statistically equalized on the two variables retained. Multiple regression coefficients for the two control variables were obtained, and hence, adjusted mean grade-point averages for the housing groups. The null hypothesis as to the differences among these adjusted means was tested by analysis of covariance.

Major Findings.—(1) The effect of type of residence upon academic achievement of men at SUI is not clear from the results. Statistically significant differences were found

among the adjusted mean grade averages for the freshmen and senior men's housing groups, but not among the groups for other years or for the 4-year period. (2) The type of residence of women at SUI has no differential effect upon their academic achievement. No statistically significant differences were found among the adjusted mean grade-averages of women's housing groups for any year.

HATCH, ASHER DEAN. A Study of the Record of Youth From the Parkrose Area Appearing Before the Multnomah County Juvenile Court. (1958, Lewis and Clark College, Portland, Oreg.)

Director of study.—L. O. McAfee.

Problem.—To study the records of youth from Parkrose Area appearing before the Multnomah County Juvenile Court.

Procedures.—The school records of subjects from the Parkrose area were studied to see whether any relationship existed between the school experiences and the records of the delinquency.

Major Findings.—Parkrose had about half the proportion of delinquents of the county as a whole. An effort was made to account for this difference, in the light of the factors in delinquency reported in several studies.

HEIMANN, ROBERT A. A Study of Attitudes Toward the Education of Arizona's Migrant Farm Children. (1957, Arizona State University, Tempe.)

Director of study.—

Problem.—To determine attitudes of Arizona elementary school teachers toward problems encountered in the education of migrant farm children.

Procedures.—Questionnaire response. N-93 teachers; 25 administrators. Data analysed by percentages only.

Major Findings.—Sampled teachers and administrators admitted great concern over the problems of educating transient children. Little concerted effort has been directed to major curriculum revision, guidance services, or other accommodation of these children. A state of readiness exists for further development of techniques which show promise in the settlement of the problems, but widespread confusion and lack of consistency in methods of approach also exist.

HELMHOLT, MARCIA BYERS. Literature on Parent-Child Relationships, 1920-1956. (Master's, 1957, University of Cincinnati, Ohio.)

Director of study.—Gordon Hendrickson.

Problem.—To discover answers to the more common problems which face the parents of preschool children as reported in the professional literature during the years, 1920-56.

Procedures.—The historical method of research was employed, treating only the more common problems of family life, but not attempting a comprehensive review of the entire mass of the literature.

Major Findings.—(1) The decade of the 1920's was greatly influenced by the theories of the behaviorists, that children's behavior was the result of the conditioning by the parents. (2) By the 1930's the findings of functionalism, psychoanalytical psychiatry, Gestalt psychology, mental hygiene, visiting teachers, and nursery school research had clearly established the principle that individual differences exist in all children. (3) The 1940's gave clearer evidence that the scientific study of children had resulted in sound principles of child development. (4) The findings of Gestalt psychology can be seen in the viewpoints of the present decade.

HOMSON, DALE T. Background of Delinquent Children. (1958, San Diego County Superintendent of Schools Office, San Diego, Calif.)

Problem.—To study the background of delinquent children.

Procedures.—Record analysis. Over 6,000 case histories of delinquent children were used, and the following data collected: (a) ages, (b) grade in school, (c) racial distribution, (d) family size (number of children), (e) parents' marital status, (f) parents' employment status, (g) incidence of delinquency as related to numerical position in the family. In these areas the data were recorded separately for boys and for girls.

Major Findings.—The data were combined and compared with the public school population with the following findings in the respective areas: (1) Parental employment status—both parents of 25 percent of the delinquent children and of 18 percent of the nondelinquent children were working. (2) Family size—32 percent of the nondelinquents and 21 percent of the delinquents came from families of two children. (3) Parents' marital status—38 percent of the delinquents and 8.7 percent of the nondelinquents came from homes where the parents were separated.

HUNT, IVAN. A Study of Attendance at Institutions of Higher Learning by the 1958 Graduates of Montana High Schools. (Master's, 1958, Montana State College, Bozeman.)

Director of study.—Milford Franka.

Problem.—To determine the effect of the proximity factor on college enrollment in Montana.

Procedures.—Data collected by questionnaire sent to all high schools in Montana. Study represents about 85-percent coverage. Data: College enrollment given by schools, county, and areas in relation to each of Montana's 11

junior and senior colleges and to the University of Montana.

Major Findings.—The effect of proximity in college enrollments varies according to breadth of the departments and course offerings.

KAUFMAN, DOROTHY BRENNAN. A Descriptive Study of the Cooperative Nursery Movement in Michigan. (Ed. D., 1957, Wayne State University, Detroit.)

Director of study.—Mildred Peters.

Problems.—To describe the population participating in Michigan cooperative nurseries according to hitherto unsurveyed factors.

Procedures.—Questionnaires were sent in 1955 to the total population of parents and teachers participating in Michigan cooperative nurseries, and to chairmen of the participating nurseries, asking some of the same information regarding the parents.

Major Findings.—Cooperative nurseries were concentrated in heavily populated areas, met most often in church schoolrooms, and drew most often from upper middle-class families but least often from the middle class as a whole. Parents joined cooperative nurseries to gain the advantages they believed would accrue from any good nursery school. The mothers' activities were administrative and operational rather than assistant teaching. Only half the fathers participated in any way. Children were reported to have gained in social development; to have learned uses of equipment, materials, and play techniques; and to have gained emotional control and independence. However, both parents and teachers cited more gains accruing for parents than for children.

KLOHR, PAUL B., ROGER A. MYERS, HAROLD B. PEPINSKY, and FRANK R. PETERS. A Study of Student Development in a Program of Teacher Education. (1959, The Ohio State University, Columbus.)

Problem.—What kind of students do the Department of Education faculty want to produce? What kind of students do they expect to produce? What kinds of students are being produced? What is the impact of curricular change upon the kinds of students who can be produced?

Procedures.—Four parts to the study: (1) a description of what instructors are attempting to teach in particular courses of instruction, of how student performance is likely to be assessed, and of students who are likely to be regarded by the instructor as successful or unsuccessful in completing the course requirements; (2) a study of students enrolled in the teacher education program, to determine whether personality types can be identified and differentiated, and whether there

are likely to be "best fits" between these empirically defined and measured personality types and the types of students who are likely to be regarded as successful or unsuccessful by particular instructors in particular courses of instruction; (3) a study of the extent to which students for whom success can be thus predicted are actually successful; (4) a study of the impact of curricular change on student personality and performance.

Major Findings.—(1) Twelve faculty members were intensively interviewed and the data were analyzed: (a) to yield inferential material that has been used to develop personality profiles of likely-to-be successful students for each instructor; (b) to yield check-list items for incorporation into the development of a forced-choice rating scale; and (c) to provide "hunches" about the social structure of the Department of Education, through analysis of the instructors' stated conceptions of their instructional tasks and modes of assessing students. (2) Seventy-nine juniors and seniors in the teacher education program were given the Stern Activities Index and Forms A and B of the Cattell 16 Personality Factor Test. The test scores, punched into IBM cards, along with other data on these students, were to be intercorrelated and the factors analyzed.

KRANTZ, PAUL G. Guidance and Counseling in the English Class. (Master's, 1967, Allegheny College, Meadville, Pa.)

Director of study.—Alfred Korn.

Problem.—To discover whether imagery makes college texts more readable, i.e., better understood and more interesting.

Procedures.—Two treatments were prepared—original and revised—of four war passages, each 500 words, from a standard American history text. The revised treatment injected only the variable of more imagery. Both treatments were equated as to difficulty and human interest, and in 24 different arrangements were administered to the entire freshman class present for orientation at Dickinson College. Criteria were carefully drawn up to include literal meaning and interpretation. Comprehension was tested by free-response and by objective tests and interest by a 5-point rating scale. The data were tested by analysis of variance.

Major Findings.—Interest very significantly higher in the revised treatments. Comprehension improved, according to the free response, and significantly improved according to the objective tests. No significant differences between men's and women's imagining responses.

LAMBETH, JAMES C. A Study of Attitudes Toward Women in the Air Force Expressed by College Students at the

University of Texas. (Master's, 1957, University of Texas, Austin.)

Director of study.—Royal B. Embree.

Problem.—To investigate the attitudes of male and female college students toward the occupation of woman officer in the U.S. Air Force. The investigation was made at the University of Texas during the 1956-57 session as the master's thesis of an instructor in the Air Force ROTC.

Procedures.—Two measures were prepared. The first was an Attitude Survey designed to measure the general favorability of reactions toward women in the military service. The second was a paired-comparisons device based on 15 occupations which usually require from 2 to 4 years of college preparation, including officer assignments in the principal military services.

Major Findings.—(1) Men and women students at the University of Texas did not favor a military career for women. All occupations, except that of policewoman, were rated as preferable to service as military officers. (2) Experimental and control groups of women were established, the experimental factor being a thorough briefing by a WAF officer concerning the officer assignment. Pretest and posttest comparisons of the reactions of the control group indicated adequate test-retest reliability for the two measures used in the study. (3) Students made no significant changes in expressed attitude as the result of having been briefed. (4) Freshman women were generally more favorable than were upper division women. (5) In general, the most favorably rated occupations (from the highest) were teacher, social worker, secretary, stewardess, medical technician, and home economist. (6) The least favorably rated occupations (from the lowest) were WAC officer, policewoman, WAVN officer, WAF officer, accountant, reporter, and registered nurse.

LEWIS, FRANK. The Status of Recognition of English Fundamentals in the Class C School Districts of Montana High Schools. (Master's, 1959, Montana State College, Bozeman.)

Director of study.—Milford Franks.

Problem.—To determine the degree to which students in small high schools master English fundamentals with the degree to which students in Class A and Class B high schools master them.

Procedures.—The entrance test results of 917 college freshmen were used, and sampling was based on one-third of the group. Item analysis was made on English fundamentals items. Nine groups were arranged on the basis of three ability groups in each of three Class A, B, and C high schools; within comparisons were made.

Major Findings.—Among the predominant error types of groups, scarcely any stood out as characteristic of any one group. Those items difficult for students in Class C schools were also difficult for students in Class A and Class B schools. No test was made of significance of differences other than observation of percent differences in difficulty of items and item types. The conclusion was made that instruction at all levels, especially in Class C schools, should emphasize elimination of common errors.

MCCARTAN, MARK ELLIS. Parents' Reactions to Conferences as a Means of Reporting Pupil Progress at Boone, Iowa, Junior High School. (Master's, 1957, Iowa State Teachers College, Cedar Falls.)

Director of study.—Wray D. Silvey.

Problem.—To determine the reactions of the parents to the conference method of reporting pupil progress at the Boone Junior High School.

Procedures.—A questionnaire, sent only to those parents who had attended the conferences for grades 7, 8, and 9 at the conclusion of the first 9-week marking period of the 1955-56 school year.

Major Findings.—Ninety percent of the parents accepted the conference programs of reporting, and 86 percent stated that the conference procedures reported their child's progress adequately. Sixty-one percent replied that 15 minutes were sufficient for a typical junior high school conference. The greatest division of opinion was regarding parents' contact with the homeroom teacher in place of a classroom teacher. While 91 percent of the parents were satisfied with the homeroom teacher's explanation of the students' progress, approximately one-sixth of the 101 written comments evidenced the parents' desire to meet with each classroom teacher rather than with the homeroom teacher.

MILLER, ARTHUR. An Analysis of Selected Research Studies, 1947-51. (Master's, 1957, Springfield College, Springfield, Mass.)

Directors of study.—Seth Arsenian, Eugene Morris, and Allen R. Kaynor.

Problem.—To see the new theoretical directions of leadership research following the leadership studies during World War II.

Procedures.—An examination of leadership studies reported in the *Psychological Abstracts* for the years 1946-51.

Major Findings.—(1) The situational and interactional theories seem to have replaced the trait theory of leadership, predominant in prewar studies. (2) Most of the experimental studies reported during 1947-51 were based on

situational, interactional, or situational-interactional theories: (a) Situational studies investigating the effects of various group factors on the leadership of the group, (b) interactional studies investigating the interpersonal relations between the leader and group members, (c) situational-interactional studies containing elements of both theories. (3) Most leadership studies are still based on the assumption that leadership means control or direction of others, only a few being genuinely concerned with developing the potentialities of group members and making use of their abilities.

McMURTRY, JOYCE NEWELL. A Study of Scholastic Achievement as Affected by Part-Time Work Participation Among Purdue Women Students. (Master's, 1958, Purdue University, Lafayette, Ind.)

Director of study.—Lee E. Isaacson.

Problem.—To investigate the effect of part-time work participation on the grade indices of Purdue Women students.

Procedures.—The IBM was used to compute recorded data on 811 women students who resided in organized campus housing and part-time employment in the fall semester of 1954. Data included orientation scores in mathematics and English and fall semester indices. Random sampling was taken to determine whether a normal caseload was being carried by working women students. Sorting and counting the key-punched cards was done by machine, and computation of mean grade index by calculator.

Major Findings.—The working students were carrying a normal course load during the semester studied. Scholastic achievement in no way appeared damaged by part-time work. The mean grade index for the working women students was 4.60, and for the total women students, 4.52. Greater disparity between these two indices would occur if the first group were deleted from the total.

METCALF, JEAN VIOLET. An Investigation of Visual-Motor Coordination in Children With Defective Articulation. (Master's, 1958, San Diego State College, Calif.)

Director of study.—William D. Kinnon.

Problem.—To determine relationship between visual-motor coordination and defective articulation.

Procedures.—The area of visual-motor coordination in articulatory defectives was investigated by administering 2 tests of these skills to 12 pairs of boys. The experimental group was diagnosed as articulatory defectives and matched on the basis of age and intelligence with boys of normal speech.

Major Findings.—Differences in the neurological development may be a factor to be con-

sidered in the education and training of the child with articulation defects. The differences in performance in tasks from the Stanford-Binet and the Merrill-Palmer tests were not significant. The results of the Block Design subtest from the Wechsler Intelligence Scale for Children showed the experimental group to be significantly less skillful than the control group in the tasks. The difference remained at the .05 level of confidence when adjustment was made for socioeconomic status. Because of the sensitivity of the Block Design in determining retardation or impairment in neurological development, there may be some differences in the development of some neurological processes between the boys and the two groups. An attempt was made, also, to measure maternal attitudes in the area of dominance. Although the results of this test were significant at the .05 level of confidence, this significance ceased to exist when adjustment was made for socioeconomic status.

NORTON, B. A. Creative Behavior as a Function of Perceptual-Conceptual Flexibility. (Ph. D., 1958, The Ohio State University, Columbus.)

Director of study.—H. B. Pepinsky.

Problem.—To investigate the relationship of perceptual-conceptual flexibility to creative behavior, assuming that this flexibility could be either induced or inhibited through the manipulation of psychological sets. *Hypotheses:* (1) Instructions to be flexible in task performance are more highly associated with greater creative task efficiency than instructions to be rigid in the task. (2) Instructions to be flexible in task performance are more highly associated with greater creative task efficiency than no task instructions. (3) No task instructions are more highly associated with greater task efficiency than with instructions to be rigid in the task.

Procedure.—A total of 60 undergraduate students in beginning psychology courses were divided into 3 groups of 20, 10 males and 10 females in each group. They were presented experimental conditions to determine the effect of induced sets leading to perceptual-conceptual flexibility on their performance of a task designed to measure their creative behavior. All subjects were given an initial visual-motor task in a normal perceptual environment. Following this, one group was given a set of ideas designed to induce perceptual-conceptual flexibility; the second, a set of ideas designed to induce perceptual-conceptual rigidity. The third group, given no set, was compared to the others as a control group. Each subject was presented the creative task involving visual-motor performance in the Ames distorted room apparatus.

Major Findings.—The two motor measures of performance variables support the first two hypotheses, but fail to support the third.

The time measure of the dependent variable fails to support any of the hypotheses. Certain aspects of creative behavior can be increased by manipulation of psychological sets leading to perceptual-conceptual flexibility, which can be induced [taught] through presentation of verbal instructions. Attempts to induce perceptual-conceptual rigidity can result in a decrement in creative performance under the normal level of creative output.

PHILLIPS, J. GEORGE. A Study of Grades at Cobre Consolidated High School for the Year 1957-58. (New Mexico Western College, Silver City.)

Director of study.—Gladys Beckman.

Problem.—To compare the percentage of letter grades with the standard generally accepted by the school.

Procedures.—(1) A simple tabulation was made of semester grades listed on the grade sheets of all teachers for the school year 1957-58. (2) Totals for each subject by semester were obtained, and the percentage for each letter grade for each subject for both semesters were calculated by simple arithmetic. (3) The totals for the two semesters were combined and a percentage figure obtained for the year.

Major Findings.—(1) There are as many distributions as there are classes, no two being alike. (2) Generally, individual departments and the whole school tend to reduce the number of grades in the middle or C group (exceptions: shop and arts and crafts departments) to a percentage, usually one to seven points) below the theoretical 38 percent recommended. (3) Distortions of the distributions generally are toward the upper, or higher, end of the scale. (Exceptions: social science, language, science, and mathematics departments.) (4) Activity-type classes (vocational classes, speech, journalism, and publications, leisure classes) usually show a preponderance of high grades. (Exceptions: typing, woodwork, art and crafts.) (5) Classes which are required of all students often show a preponderance of D grades. (6) The percentage of letter grades assigned by the Commercial Department most nearly approaches the theoretical values advanced by Rugg. (7) The overall tendency of the school is to assign about one-third C grades and, of the remainder, about 9 percent more above-average than below-average grades. (8) A student is, apparently, twice as likely to make a "B" in a Preparation-for-Leisure course as in a Preparation-for-College course; twice as likely to fail the Preparation-for-College course as the Preparation-for-Leisure course.

POTDEVIN, ANITA M. Survey of the Enrollment of Girls in the Physics Course in the Four Public High Schools of Jersey City, N.J., for the year 1955-56. (Mas-

ter's, 1957, Montclair State Teachers College, Montclair, N.J.).

Director of study.—Orpha M. Lutz.

Problem.—(1) In the four public high schools of Jersey City, during the school year September 1955 to June 1956, was the percentage of girls taking physics small as compared to the percentage taking other science courses in this high school and also in other New Jersey high schools? (2) What could be done to increase the enrollment of girls in the physics courses of the four Jersey City public high schools?

Procedures.—Reports sent to the State Department of Education by high schools with similar structure giving their enrollments in physics for the year were examined. Questionnaires were distributed to the 11 guidance counselors, 9 physics teachers, and the 363 girls in the 12th grade who had taken the general or college preparatory courses in the 4 high schools requesting reasons for the enrollment of girls in the physics course. Suggestions to increase the enrollment were also asked.

Major Findings.—The ratio of boys to girls taking the physics course in the State of New Jersey was 5.2 to 1; in Hudson County, 6.7 to 1; and in three public high schools of Jersey City, 14.5 to 1. The overall ratio for the State and for Jersey City was slightly higher than the national figure in 1947-48. The girls' reasons for taking or not taking physics did not agree with the opinion of the counselors, who stated that their advice had been the most important factor in the decision reached. Though more than 50 percent of both the teachers and girls who had studied physics displayed an interest in atomic physics, the syllabus adopted by the Jersey City Board of Education, March 1946, did not include a unit in this subject area. The evidence from this investigation suggests a need for a revision of the physics curriculum in Jersey City, if girls are to elect the course.

RIDDLE, SUE ROBERTS. Survey of Literature on Gifted Children, 1944 to 1953. (Master's 1957, University of Cincinnati, Ohio.)

Director of study.—Gordon Hendrickson.

Problem.—To review available literature on gifted children published during the 10-year period, 1944 to 1953; to ascertain the characteristics of gifted children in order to determine their educational needs.

Procedures.—By means of the historical method, data were obtained from books, monographs, doctoral dissertations, and educational journals.

Major Findings.—Three types of gifted children were described—those with superior intellectual ability; those with special abilities in areas such as art, music, science, and

mechanics; and those with creative ability. Generally, gifted children are decidedly superior in intellectual, emotional, and physical traits, and only slightly ahead in social traits. They excel in enthusiasm, persistence, and eagerness to learn and assume responsibility, and in intellectual modesty. Surveys of educational practices in the United States have shown that only a small number of elementary and secondary schools have a systematic program to develop fully the abilities of the gifted. Ability grouping, individualized instruction, enrichment, acceleration, and segregation into special classes are the types of programs most commonly employed.

ROSS, BYRON K. A Study of the Academic Achievement of Three Classes in Grades One to Six in the Township Schools of Carroll County, Indiana. (Ph. D., 1958, Purdue University, Lafayette, Ind.)

Director of study.—Lee E. Isaacson.

Problem.—To determine the effects of age of school enrollment and retention upon pupil achievement, the validity of lower grade achievement scores as predictors of subsequent academic progress, and the relationship between achievement scores and intelligence quotients.

Procedures.—An investigation was made of the academic progress of 657 pupils who had entered the first grade of 1 of Carroll County's 14 elementary schools in 1948, 1949, and 1950. The pupils in each of these classes were divided into three groups—superior, average, and poor—on the basis of grade 1 achievement scores from the Metropolitan or Stanford Achievement Tests. Pupils in grade 1 were given the Detroit First-Grade Intelligence Test, Revised, and the Otis Quick-Scoring Mental Ability Test was administered to all pupils in grade 5. A group of 88 pupils who were retained were compared to a not-retained control group on the basis of age, achievement, and intelligence. Coefficients were computed by the Product-Moment Method. Examination of data was by analysis of variance.

Major Findings.—Age at entry into first grade had virtually no effect on achievement up to and including achievement at end of 6th grade. The children retained had an average annual gain in achievement of .67 of a grade, while the average gain of the control group was .83. Correlations of IQ with achievement scores ranged from .575 to .671 in grade 1 and from .669 to .801 in grade 5, thus indicating that achievement tests measure, in part, mental processes that are important indications of intellectual ability. The predictive value of the achievement score appeared to increase significantly at the higher grade levels, becoming as great as .961 and .975 between 2 of the classes when scores in grades 5 and 6 were compared.

SAGNER, DON FRED and JACK M. THOMPSON. Review of Research on Promotional Policy—Acceleration and Non-Promotion. (1958, Office of the Superintendent of Sonoma County Schools, Santa Rosa, Calif.)

Director of study.—Gerald W. Redwine.

Problem.—To review empirical studies in professional journals on acceleration and non-promotion practices.

Procedures.—Review of literature.

Major Findings.—Acceleration of intellectually gifted students seems to be an appropriate promotional policy. On the other hand, there is little to support the advisability of non-promotion.

SMITH, FRANK PORTER. A Comparison of the Attitudes of "Suiters" and "Non-Suiters" of Low Motor Ability in Physical Education at Lincoln High School. (Master's, 1958, San Diego State College, Calif.)

Director of study.—W. H. Lauritsen.

Problem.—The largest single cause of boys' physical education failures in the high schools of the San Diego city school system is the problem of "nonsuiting." Most of the boys who do not "suit-up" have low motor ability. The purpose of this study, therefore, is to compare the attitudes toward physical education held by the nonsuiters and suiters among the boys of known low motor ability at Lincoln high school.

Procedures.—A questionnaire was administered to three groups consisting of 34 boys: (1) suiters of known upper motor ability, (2) suiters of known low motor ability, and (3) nonsuiters of known low motor ability.

Major Findings.—All three groups showed the highest percentage of unfavorable responses in the area of instruction. There was less acceptance of the instructor by the nonsuiters than by the suiters. Poor health did not seem to be a factor contributing to failure. Shower and dress regulations seemed to annoy the nonsuiters.

SMITH, VERN L. A Comparison of the Reasons for Failure as Given by Teachers and Pupils. (Master's, 1957, The University of Akron, Ohio.)

Director of study.—Mabel Riedinger.

Problem.—To examine and compare the reasons for pupils' failure, as given by both

teachers and pupils, without any attempt to analyze underlying psychological factors.

Procedures.—Brief questionnaire circulated to selected teachers and pupils asking reasons for failure of pupils who had been given a grade of "Failure."

Major Findings.—Forty-eight percent of the teachers and 53 percent of the pupils attributed failure to poor study and work habits; 82 percent of the teachers and 11 percent of the pupils gave lack of ability as the chief reason. Ten percent of the teachers and 11 percent of the pupils attributed failure to attitude. Remedial work seems indicated in study and work habits.

TRUMPE, RICHARD MARTIN. A Study of Selected Large University Student Handbooks. (Master's, 1958, Purdue University, Lafayette, Ind.)

Director of study.—Lee E. Isaacson.

Problem.—To investigate the student handbook in the large university—its basic content and mechanical characteristics; to obtain and study opinions and factual information from selected university student personnel administrators responsible for student handbooks; and to study the ideas, opinions, and suggestions of a sample of an undergraduate student body of a large university concerning the student handbook; and to inquire as to the ways in which they use it.

Procedures.—Content analysis to evaluate the handbooks of 26 universities. Questionnaires solicited specific information and opinions from a random sample of 10 percent of the undergraduate student body of Purdue University concerning the Purdue student handbooks, and from the deans of men in the 26 universities concerning their respective handbooks.

Major Findings.—The favorable attitudes expressed by students and college personnel administrators point toward the continued use of the student handbook as a means of university-student communication. Effectiveness of the handbook may be improved by: (1) sending it to all entering students before they arrive on campus; (2) having it readily available to the remainder of the student body, faculty, and administration at all times; (3) revising it annually in view of changing university conditions; and (4) using it directly as the university's major official publication for the new student-orientation program.

Titles of Additional Studies

SUMMARIES were not available for the studies listed below. The listing is alphabetical by author. These studies are not classified by area as are the summarized studies on the preceding pages.

ALMGREN, RUTH M. College Placement and Occupational Realism. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

ATKINS, CATHERINE MENCER. A Study of Applicants for the Master of Education Degree at the School of Education, Boston University from 1947 to 1957. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

ATWATER, CHARLES RUSSEL. A Study of the Increased Emphasis on Pastoral Counseling. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

BAKER, A. A Study of the Scholastic Achievement of Fifty-six Students at Boston University Junior College and Boston University School of Education. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

BASILE and BERENSON. A Study of the Personality Characteristics, Interests, and Abilities of Boston University. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

BISLOW, JOHN. Ideas and Problems in Counseling. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

BOUBGAE, ELLSWORTH J. The Construction and Evaluation of an Instrument Based on Q-Methodology Which Measures the Relative Importance of Self-Perceived Needs of the Tuberculous. (Ed. D., 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

BRENNAN, JOHN JAMES. An Experimental Study of the Effect of the Manipulation of the Anxiety Level Through the Use of Sodium Amytal on the Learning of Emotionally Charged Material. (Ed. D., 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

BROMFIELD, MYRA. An Examination of the Counseling Services Being Offered by Boston Private Secretarial Schools. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

CRAWFORD, DOVER O. A Survey of Music Therapy. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

DAVIS, ALBERT S. The Relationship of Law and Education in the Commonwealth of Massachusetts. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

DEGREER, STANLEY L. A Survey of Retention in the Elementary Schools of Los Alamos, New Mexico. (Master's, 1958, The Colorado College, Colorado Springs.)

Director of study.—J. Victor Hopper.

DOYLE, L. An Analytical Survey and Study of Counseling Attitudes and Practices of Baptist Clergymen in New England. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

ELIAS, GEORGE SELENE. An Experimental Study of Teaching Methods in Ninth Grade Social Studies Classes. (Ed. D., 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

FRAWLEY, H. M. An Investigation of a No Steady Dating Rule Imposed on the Boys and Girls High School of a Typical Urban Community. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

HAMLIN, TALBOT F. Who Takes Aptitude Tests? (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

HARRIGER, FRED E. A Comparative Study of Behavior Patterns and Intelligence Quotients of a Selected Seventh Grade Group. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

HARRIS, JERRY WESLEY. The Adolescent Boys' Changing Voice. (Master's, 1957, Lewis and Clark College, Portland, Oreg.)

Director of study.—L. Tomlinson.

HECKMAN, NORMAN W. A Study of the Relationship Between Self-Concept Discrepancies and Personal Adjustments. (Ph. D., 1957, University of Oregon, Portland.)

Director of study.—

HUBBARD, ELAINE C. The Contribution Made to First-Year Nursing Students by a Study of Patient-Nurse Relationships Integrated in Fundamentals of Nursing: An Experimental Study. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

JACKSON, HAZEL. Improving the School's Holding Power Through Counseling. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

JONES, BOBBY and JOAN R. ADASKIN. A Study of the Attitudes of High Scholastic Achievers and Low Scholastic Achievers Towards Their Teachers. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

KAUFFMAN, JOSEPH FRANK. A Study of Student Personnel Services as Found in Liberal Arts Classes. (Ed. D., 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

KUMFAN, H. A. A Comparison Study of Satisfaction and Dissatisfactions Between Student and Graduate Nurses. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

LINKSEY, ARTHUR O. A Study of Teacher Attitudes and Practices Affecting the Guidance of Children in Selected Elementary Schools of North Carolina. (Ph. D., 1957, University of North Carolina, Chapel Hill.)

Director of study.—A. M. Jordan.

LUTTRELL, JACK S. A Comparative Investigation of the Academic Achievement and Personality of Gifted Sixth-Grade Pupils in a Special Class and in a Regular Classroom in the Public Schools of Greensboro, North Carolina. (Ph. D., 1958, University of North Carolina, Chapel Hill.)

Director of study.—W. D. Perry.

MAHON, FLORENCE LUCY. First-Grade Word List for Articulation Testing Combining Reading, Speaking, and Writing Vocabularies Classified by Speech Sounds and Arranged by Frequencies. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

McKINNEY, EVA DORIS. A Study of the Relationships Between Certain Factors of Personality and Selected Components of Physical Fitness. (Ed. D., 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

NOONAN, ALICE. A Plan for a Guidance Program in a School of Practical Nursing. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

O'CONNELL, R. R. The Development of a Handbook for the Prospective College Students at Somerset High School, Somerset, Massachusetts. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

OWINGS, FREDA E. An Investigation of Trends in Centralization or Decentralization of the School Guidance Program. (Master's, 1957, University of Nevada, Reno.)

Director of study.—R. DeVeri Willey.

POWERS, F. A. A Survey of Factors Related to Evening Division Students Needs at Boston University. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

PRICE, MARGERY. A Recommended Guidance Program for the Carson City High School. (Master's, 1957, University of Nevada, Reno.)

Director of study.—Thomas T. Tucker.

RAMSEY, E. L. An Investigation Into the Degree of Utilization of a Counseling Approach by Physical Therapists in the Treatment Situation. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

KEYFOLDS, OLIVE N. Study To Determine Democratic-Autocratic Attitudes In Nurse Groups Within a Selected Hospital. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

RIVERS, FRANCIS. A Study of Motivation. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

ROTMAN, C. B. A Study To Gain Further Information Regarding the Relationship of Aptitudes and Interests. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

SINIAPLIN, S. N. A Comparison Between Academic Success and Responses on a Sentence Completion Test. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

SOUTHWORTH, ROBERT S. A Descriptive Study of the Development of a Guidance Program in a Small Secondary School. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

SPIDEL, AGNES H. A Study of School Practices To Aid New Pupil Orientation. (Master's, 1958, Lewis and Clark College, Portland, Oreg.)

Director of study.—L. O. McAfee.

STELLA, ELAINE T. Guidance and Counseling Inquiry Concerning Sorority House Operations and Regulations in American Colleges. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

STRAUCH, ARNOLD C. A Study of Testing Practices in North Carolina Elementary Schools During the 1952-53 and 1953-54 School Years. (Ed. D., 1957, University of North Carolina, Chapel Hill.)

Director of study.—Arnold Perry.

TORONOWSKI, DOLORES. A Study of the Opinions and Actions of Elementary School Teachers and Pupils Regarding the Correcting of Papers. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

TRIBOU, VIRGINIA. A Study of the Predictive Value of the Gilmore Sentence Completion Test in Relation to Academic Achievement in Private Junior College. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

WALTER, PAUL B. A Study of Anxiety Among Elementary and Secondary Education Majors in the School of Education of the University of North Carolina. (Ph. D., 1958, University of North Carolina, Chapel Hill.)

Director of study.—W. D. Perry.

WARSUA, R. G. An Analysis of the Vocational Choices of Marines Who Were Released to Inactive Duty at the Marine Barracks, U.S. Naval Base, Massachusetts Public Schools. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

WARREN, JOSEPH ARBAYE. A Guidance Program for the Elementary School, Pueblo, Colorado. (Master's, 1957, The Colorado College, Colorado Springs.)

Director of study.—J. Victor Hopper.

WARREN, R. A. A Study To Determine the Function of Guidance Directors and Counselors at the Secondary Level in Massachusetts Public Schools. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.

WHARTON, WILLIAM POLK. Picture-Forming Words and the Readability of College History Texts. (Ph. D., 1952, Columbia University, New York.)

Director of study.—Ruth M. Strang.

YOU, JANE. A Brief Study of the Contents of Theses Done by Graduate Majors in Boston University School of Education in the Past Five Years. (Master's, 1958, Boston University, Mass.)

Director of study.—Dugald Arbuckle.