AN ABSTRACT OF THE THESIS OF

ROBERT JOSEPH KREMER (Name) for the ED. D. (Degree)

in GUIDANCE (Major) presented on April 11, 1968 (Date)

Title: OBJECTIVES, COURSE CONTENT, AND PREPARATION OF TEACHERS FOR PSYCHOLOGY CLASSES IN OREGON HIGH SCHOOLS

Abstract approved: [redacted]
Denis Baron

Problem

The purpose of this investigation was to examine the status of high school psychology in the state of Oregon by comparing Oregon high school psychology with (1) general information from the literature, (2) information obtained from a survey of 130 high school psychology teachers in the United States, (3) information obtained from 31 psychologists known to be interested in high school psychology, and (4) information obtained from the Oregon State Department of Education.

Procedure

A questionnaire was developed, validated, and sent to 37 teachers of high school psychology in Oregon as identified by the Oregon

State Department of Education. All teachers returned the questionnaire. Information from the questionnaire was compared with similar information from the literature, from 130 psychology teachers in the nation, from 31 psychologists, and from the Oregon State Department of Education.

The Chi Square test was used to compare the differences between the Oregon teachers and the other groups. Since the information from the Oregon State Department of Education was not appropriate for the Chi Square test, the Spearman Rank Correlation Coefficient was also computed for all the data.

Finally, the data provided by the Oregon teachers were used to establish groups based on selected variables. Size of school, length of the course, experience of the teachers, other courses taught, and the future plans of the students were the variables used.

Findings

The results of the Spearman test show that the objectives stressed in high school psychology classes in Oregon are not like those stressed or considered to warrant emphasis by the three criterion groups. Considering the individual objectives, all three groups indicate that they would stress the Scientific objective to a significantly greater degree than the Oregon teachers do. Both the psychologists and the national teacher sample disagree with the

emphasis placed by the Oregon teachers on the Learning, Family Living, and Philosophy of Life objectives. There is no area where all three criterion groups agree with the Oregon teachers.

Only in the Individuality course content area do all three criterion groups agree with the emphasis by the Oregon teachers. Only in the Learning and Thinking area do all three groups disagree with the Oregon teachers. Although the psychologists and the national teacher sample indicate significantly more time should be spent in the Learning and Thinking area, the Oregon State Department of Education indicates that less time should be spent in this area than the Oregon teachers actually spend. Using the Spearman test, two of the criterion groups agree with the national teacher sample and the Oregon State Department of Education. Both of these groups are adequate predictors of the content of psychology as taught in Oregon while psychologists are not.

Establishing certification requirements for teachers of high school psychology seems to be a very difficult task. Psychologists generally want to set the standards too high for psychology teachers to meet. The Oregon State Department of Education makes no effective statement concerning required preparation. Yet the Oregon teachers are generally prepared better than the average of psychology teachers in the United States.

Comparing various groups of Oregon teachers to each other

revealed very little difference in the content of the courses or the objectives for the course no matter what variables were used to divide the groups.

Summary and Conclusions

On the basis of the data collected, little similarity was found between the three criterion groups and the Oregon high school psychology teachers. The present study points to the necessity of more research on high school psychology, the need for more specific training, and the desirability of an organization of high school psychology teachers.

Objectives, Course Content, and Preparation of Teachers for Psychology Classes in Oregon High Schools

by

Robert Joseph Kremer

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Doctor of Education

June 1968

APPROVED:

[redacted]

Professor of Education
in charge of major

[redacted]

Head of Department of Education

[redacted]

Dean of Graduate School

Date thesis is presented April 11, 1968

Typed by Donna Olson for Robert Joseph Kremer

TABLE OF CONTENTS

LIST OF TABLES

OBJECTIVES, COURSE CONTENT, AND PREPARATION OF TEACHERS FOR PSYCHOLOGY CLASSES IN OREGON HIGH SCHOOLS

I. INTRODUCTION

In his book The Changing School Curriculum, John I. Goodlad (26) points out that the present curriculum reform had its start at the end of World War II. Evaluation of young men inducted into the armed services had revealed serious inadequacies in their science and mathematics backgrounds. "Educators, parents, and other interested citizens voiced their concern and thus were instrumental in starting what has proved to be a substantial reform in the curricula of our elementary and secondary schools" (26, p. 9).

Goodlad describes the contributions of groups such as the Physical Science Study Committee, the School Mathematics Study Group, and the Foreign Language Program to the fields of science, mathematics, and foreign language. But when examining the effect this type of curriculum reform has had on the present school curriculum, he expresses concern.

"If previous eras of curriculum development can be described as child centered or society centered, this one can be designated as subject or discipline centered" (26, p. 14-15). Goodlad raises the question as to whether this emphasis on subject matter is meaningful to the adolescent or whether his school day and the rest of his life

remain worlds apart.

He also expresses concern about the emphasis placed on certain subjects in the present school curriculum.

> ...one wonders too about the subjects left out of the curriculum, simply for lack of time. Some fields of study are now more deeply entrenched in the high school than ever before, mostly because large sums of money have been available for their updating. As a consequence, some relatively new subjects representing exciting advances in human knowledge have been left at the curricular periphery... (26, p. 16).

Finally, Goodlad points out that the present curriculum reform is being controlled by people who are not locally concerned with the schools.

> There are lessons here for anyone seeking to influence American education, and there are complex issues pertaining to what is to be learned in the schools, who is to determine what is to be learned, and how continuing curriculum revision is to be conducted and controlled (26, p. 14).

He makes this point more emphatic when he states:

> Few state departments of education and even fewer school districts have seriously tried to determine the precise purpose of their schools and the objectives to be achieved. And yet Americans cling stubbornly to the idea of local control of education while permitting, through sheer neglect, many of the most important decisions to be made by remote curriculum planners. To develop an increased awareness of what these decisions are and to whom we are leaving the responsibility for making them is a curricular agenda item for tomorrow (26, p. 17).

It seems to the writer that meaningful curriculum change must be based on the contribution of three distinct groups with three distinct but overlapping interests. First of all, the experts in the field

are concerned with the accuracy of the information imparted to the students. Their contribution is a vital one and the rapid advances in modern knowledge make it imperative that their contribution be a continuing one.

Secondly, the state departments of education must fulfill their responsibility by thoroughly studying proposed curriculum packages and accepting or modifying them. This acceptance or modification must be based on the educational aims of the specific state.

Finally, the local school system or, in some cases, the local school must adjust the proposed curriculum changes to the needs of the specific student population. This is the key step in curriculum revision. Without careful consideration of the needs of specific student populations, the ultimate aim of all three groups, more appropriate and effective student learning, will not be achieved and the best curriculum revision will fail.

The present study is seen as an attempt to examine curriculum based on nation-wide, state, and local data. High school psychology, a course that is not in the mainstream of the modern secondary curriculum, has been chosen for examination. The geographic area involved is the State of Oregon. Nation-wide or "expert" opinions are derived from a nation-wide sample of high school psychology teachers and a nation-wide sample of psychologists interested in high school psychology. The State of Oregon has provided a guide to high

school psychology in Oregon. And the teachers of high school psychology in Oregon have answered a questionnaire concerning the present nature of the course.

The Problem

The problem of this paper simply stated is, "What is the status of high school psychology in Oregon?" Complete realization of the purpose of this study involves answering a series of questions in two areas. The first area concerns the extent of agreement between the psychology course proposed by the Oregon State Department of Education and the classes taught in Oregon. The following questions are to be answered:

1. Are the objectives and course content suggested by the Oregon State Department of Education reflected by the psychology classes taught in the state of Oregon?
2. Are the teachers prepared to teach psychology in accordance with the preparation suggested by the Oregon State Department of Education?

The second area concerns a comparison of the psychology taught in the state of Oregon and that taught or proposed for the rest of the United States. In this area, the following questions will be answered:

1. Is the high school psychology course offered in Oregon

similar to high school psychology offered in a sample of courses in the United States?

2. Is the high school psychology course offered in Oregon similar to the course recommended by a sample of psychologists in the United States?
3. Are Oregon high school psychology teachers prepared in accordance with preparation recommended by a sample of psychologists in the United States?

Methods of Research

The following procedures were used in gathering and analyzing the data:

1. The results of a questionnaire concerning objectives and course content of high school psychology courses in the United States were obtained from Dr. T. L. Engle of the University of Indiana, Fort Wayne Center.
2. A list of courses suggested as preparation for high school psychology teachers by psychologists was obtained from an article by Dr. K. E. Coffield (5).
3. A questionnaire was developed based primarily on the above two sources. It was sent to Oregon teachers of high school psychology as identified by a listing made by the Oregon State Department of Education. Follow-up letters

and telephone calls were made where needed. (See Appendix A.)

4. The recommended psychology course for Oregon was identified from the Guide to Secondary Education in Oregon, published by the Oregon State Department of Education, Salem, Oregon, 1966, p. 54 and 55.

5. The results of the questionnaire returned by the Oregon teachers were compared with:

   a. the results of the questionnaire reported by Engle for a sample of high school psychology teachers in the United States.

   b. the results of the questionnaire reported by Engle for a sample of psychologists in the United States.

   c. the academic preparation proposed by a sample of psychologists as reported by Coffield (5).

   d. the psychology course recommended by the Oregon State Department of Education.

   e. the preparation of high school teachers recommended by the Oregon State Department of Education.

Definition of Terms

1. Oregon high school psychology teachers are those listed by the Oregon State Department of Education as teaching a

course called "psychology" in secondary schools in Oregon.

2. National psychology teacher sample refers to a sample of 130 high school psychology teachers surveyed by T. L. Engle as reported in the American Psychologist, February, 1967 (13).

3. National sample of psychologists refers to a sample of 31 psychologists surveyed by T. L. Engle as reported in American Psychologist, February, 1967 (13).

4. High school psychology is a course containing a degree of psychological subject matter offered in some high schools in the United States. It is usually an elective available to juniors and seniors and is one-semester or two-semesters in length.

5. Objectives refer to specific objectives for high school psychology courses as compiled by Engle in the article noted above.

6. Course content refers to what is being taught or what is proposed for teaching in high school psychology classes.

7. Teacher preparation is composed of formal college courses which prepare teachers to teach high school psychology courses.

8. A.P.A. refers in this paper to the American Psychological Association.

Limitations of the Study

Original research for this study is confined to the results of the questionnaire obtained from Oregon high school psychology teachers. Further, implications and conclusions concern the present status of high school psychology in Oregon and may not be applicable to other states.

No attempt has been made to compare the psychology courses in the various Oregon high schools and no recommendations are made concerning the nature of the ideal high school psychology course. Although implications may be drawn concerning the needs of students in Oregon as compared to the needs of students in the United States based on the objectives and course content of psychology courses, no attempt has been made to survey the needs of the high school students in Oregon. The writer contends that such a general survey would not be significant because of the wide variety of possible needs in the various sections of Oregon. The writer further agrees with Goodlad (26) that it is the responsibility of the specific local school system or local school to make the psychology course, or any course, consistent with the needs of the local student population.

This status survey is seen as the first step in an attempt to direct attention toward high school psychology in Oregon with the aim of improvement.

II. REVIEW OF RELATED LITERATURE

According to Coffield and Engle (6) high school psychology is not a new course in schools in the United States. It has been in the high school curriculum since 1885 and possibly longer. Engle (20) points out that by 1857 St. Louis, Missouri offered a high school course in Mental Philosophy which seems to have been something of a psychology course for that day. He goes on to say, "In the late years of the 19th and early years of the 20th centuries, Iowa, and probably other states, was offering psychology in high schools as a 'professional' course for students who were planning to teach in elementary schools after high school graduation" (p. 3).

"The state of North Dakota....not only had offered a one-semester course in psychology since 1920 but as late as 1940 each student taking the course was required to take a state examination on the subject" (Engle and Coffield, 6, p. 350). Engle (20) reports that an A. P. A. committee report in 1937 stated that from 1929 to 1934 there was a steady increase in the popularity of psychology courses in the high school curriculum. A still greater increase has been reported in the 1940's and early 1950's. Engle's (6) survey of principals and teachers showed that dates for introduction of psychology into the curriculum ranged from 1885 to 1959 with most new courses being initiated in 1949. The same study reports that the number of

classes each high school offers per year is on the increase.

Once psychology is in the curriculum of a high school, it tends to stay. Eighty-two percent of the schools in the survey by Engle and Coffield (6) kept the course once it was in the curriculum. The major reason for dropping the course was the lack of a qualified teacher. Psychologists, according to Lucas (32) are no longer debating whether psychology should be taught in high schools. It is an accomplished fact. Helfant (27) states that the first time the A.P.A. organized a committee to study the situation in high school psychology was in 1935.

There seems to be no disagreement to the fact that psychology in high schools has been in the curriculum for a long time and the number of courses has been increasing in recent years (Engle, 22; Engle, 9; Engle, 10; Roback, 30; Stone and Watson, 44; Louttit, 31; Helfant, 27). It is mostly available to juniors and seniors. A survey of 147 high school teachers in 26 states by Engle (9) revealed that 98.6% of the courses was available to seniors only. Engle (16) reports that high ability students take the course, especially girls. Although most high schools offer psychology as a course to both college and non-college bound students, about a fifth of them consider the course as primarily for students planning to attend college (Engle, 14). Only about 2% of the high schools offer the course primarily for students not planning to attend college. Even in schools where

the course is primarily for students planning to attend college, psychology is regarded as a terminal course and not as a preparation for college courses in psychology (Engle, 19).

Engle (20) points out the present situation:

> In making a survey of the teaching of psychology at the high school level, it might seem that the task would become easier as one turns from the past to the present, but such is not the case. We do not even know with certainty how many high schools teach psychology, or even how many states have within their boundaries high schools which teach psychology. There have been times when two psychologists working independently have written to state departments of public instruction concerning the number of schools offering psychology. From a given state one psychologist would receive a reply indicating that psychology was not offered in any high school in the state whereas the other psychologist would receive a reply indicating that several high schools in the state did teach psychology... In some states where it is reported that no high schools teach psychology, letters are received from teachers of psychology asking for assistance. Apparently we are safe in saying that psychology is taught in at least some high schools in each of the 50 states. A member of the Division 2 Committee on High School Psychology has a mailing list of about 2300 high schools actively engaged in teaching psychology or expressing an interest in offering such a course (p. 4).

Stanley and Abrams (43) in a report sent to participants of a survey of heads of psychology departments concerning practices of training teachers for high school psychology state:

> Basically, the situation of high-school teaching of psychology is very similar to that of any economically underdeveloped body needing resources to bring about development which can be obtained only after development has begun. A 'take-off' is required. The resources consist of well-prepared teachers of high-school psychology and high quality institutions to prepare them. There is an abundant supply of students who want to be prepared and of

> institutions that want to prepare them, but this is generally as far as it goes. It goes no further because the institutions find little demand for their graduates and no certification for them in the state in which the college is located. But these obstacles seem largely a result of the present situation--no supply.
>
> Some state departments of public instruction are taking steps to do their part to change this situation; some institutions are doing what they can to get around the obstacles; some students are willing to take two majors instead of one, or an additional strong minor, so that they can teach psychology. Many high schools are themselves submitting proposals for psychology courses in hope that competent instructors will become available. Nevertheless, there is a long way to go before high-quality high-school teachers of psychology will be turned out in large quantities. 'Retreading' of already certified high school teachers during summer sessions may be needed to augment the baccalaureate-level trickle until it becomes more of a torrent (p. 5).

Suggestions are that psychology should be a one-semester high school course (Engle, 14; Noland, 35; Oregon State Department of Education, 36). And most students in the United States are enrolled in one-semester courses (Helfant, 27). But Engle's (9) survey of high school teachers revealed that 68.3% felt that it should be a two-semester course and 7.9% felt that it should be longer than two semesters. There is evidence to support the idea that students of two-semester courses feel psychology is more valuable than students of one-semester courses (Engle, 9), but more students in one-semester courses felt that high school psychology gave them the correct impression of the field of psychology than students in two-semester courses (Engle, 11).

There seems to be very little agreement among psychologists

or among teachers of high school psychology as to what the aims and objectives of high school psychology should be. A survey of 100 members of A. P. A. revealed that 48% thought psychology should be taught as a science, 29% as a social science, and 23% either. But most high schools teach it as a social science (Engle, 15). In the opinion of Lucas (32) the purpose of a high school psychology class should be to present psychology as a science, to advise youth of career opportunities in psychology, and to develop a better informed public. But Engle (22) finds that the actual purposes for offering a high school psychology class seem to be to help students understand themselves and others, to develop an understanding of social problems and increase the ability to live harmoniously with others, and to provide instruction in the elementary principles of psychology.

Rupe (40) feels that psychology is best suited to answer most of the objectives of modern education: self realization, understanding others, adjustment to the environment, and understanding social problems. Belensky feels that the counselor should be the principal psychologist in the high school. And he feels that the counselor-psychologist should have a unique relationship to the school and staff.

> The most advantageous spot for the counselor-psychologist in the secondary schools would appear to be right within a classroom, his <u>own</u> classroom. His duties and goals would be fourfold:
>
> (a) to train social, responsible, authoritative and autonomous behavior in students.
>
> (b) to teach self-awareness and thus self-determination.

> It is not enough to simply instruct a student how to behave with respect to others. One must train him to observe and evaluate himself in the process of interacting so that he may assess his strategies in terms of his goals and modify either if necessary.
>
> (c) to serve as a fountainhead of information in the area of psychology generally and behavior change artistry specifically for the rest of the faculty. Many in the field spend considerable time consulting with teachers. The role is often an uncomfortable one. Some teachers imbue the counselor with more magic than he possesses and some with far less. Many teachers who seem to need consultative help the most also resent the counselor's help the most. But consultation should be a two-way street. It makes perfect sense to envision each teacher as a fountainhead of information within his own area of interest and expertise. The counselor would appreciate help in curriculum matters as well as a faculty seminar in English, Math, or Social Studies from his colleagues while the counselor, himself, could conduct one for them on behavior change artistry. In this way discomfort, hostility, and unreal expectations might be reduced while the probability of true collaboration and mutual growth would be increased.
>
> (d) to be the center of applied psycho-educational research for the school. Coordinated by the counselor-teacher, research could easily be carried on by both students and other faculty members on such matters as attitudes toward learning within the student community, evaluation of both teacher and student effectiveness, etc. Information gleaned from such research could be of immediate and inestimable value to the students and teachers, and could lead to action programs designed to ameliorate conditions thus identified (2, p. 45).

Bryant finds that "High school psychology is primarily a course in mental hygiene, i.e., an exploratory course which allows both the student and teacher to explore the student's needs and which, through the self understanding thus gained by the pupil, fosters the fulfillments of those needs (4, p. 75).

The course content of high school psychology courses seems to

be as varied as the objectives. Dr. Engle (14), when he was trying to select one or two representative outlines from those supplied by high school teachers, found that these outlines differed so greatly in objectives and in subject matter to be stressed that it was impossible to select one or two as typical outlines. Belensky states,

> Each teacher has taught according to his own intuitions and limited knowledge....Course content has varied all the way from experimental and theoretical realms, through insanity and psychotherapy to discussion of that which 'really interests teenagers,' dating behavior and sex (2, p. 41).

Engle (19) finds that teachers of high school psychology tend to stress practical application of psychology; self understanding and social adjustment. They concentrate on personality, adjustment, and mental hygiene (Engle, 15).

Helfant and Jersild (28) report the results of a conference which was held at Teacher's College, Columbia University, in July, 1952. Sixteen people from 13 states met to discuss issues and possibilities of teaching psychology in high school. The conclusion of the conference was that high school psychology should stress students' understanding of themselves and others and of personal and emotional problems.

Psychologists believe that the scientific nature of psychology should be stressed more in high school psychology. A summer course for high school psychology teachers held at Claremont College in 1963 taught courses in statistics, testing, research design,

and adolescent psychology (Lucas, 32). In a survey by Engle (14), psychologists ranked the scientific course areas higher than did high school psychology teachers.

Although teachers of high school psychology are usually the older, more experienced teachers, they are not generally well trained in their subject matter. Coffield (5) found that the mean total of undergraduate and graduate psychology course hours considering only those not required for an education certificate was 8.26 semester hours. Engle (19) found that the mean number of semester hours of training in psychology for high school psychology teachers (considering all courses) is between 15 and 25, probably closer to 15 than to 25. The North Central Association for accreditation requires that high school psychology teachers have 18 quarter hours in social science of which five must be in general psychology. But Engle (15) found that 71% of the teachers had more than five years of teaching experience and 60% to 75% of the teachers had Masters degrees or better (Engle, 16).

When asked for recommendations for preparation of high school psychology teachers, 100 members of A.P.A. set the requirements so high that most high school psychology teachers could not be induced to meet them (Engle, 15). The mean number of hours which state officials felt was desirable for a license requirement was 17.7 quarter hours (Engle, 22).

Engle (22) reports that very few of the high school psychology teachers teach psychology full time. More than half of them engage in other psychological work such as counseling or testing. The most frequently mentioned subjects that they teach in addition to psychology are social science, science, and mathematics. One third of the men teachers are also serving as principals or superintendents.

Engle (22) found that the textbooks most often used in high school psychology were: Averill (1), Crow and Crow (7), Duvall (8), Engle (17), Geisel (25), Landis and Landis (29), Ruch, Mackenzie, and McClean (39), Sorenson and Malm (41), and Woodworth and Sheehan (45). McNeely (34) surveyed Indiana and found that the single text book most frequently used was Engle (17). Teachers tend to turn to popular and semi-popular books rather than to scientifically orientated teaching material for their own and student reading (Engle, 19). Engle's (21) survey of 217 teachers in 34 states revealed that only four teachers reported using journals published by the A. P. A. as supplemental reading and only two journals were mentioned: Journal of Applied Psychology and Journal of Abnormal and Social Psychology.

High school textbooks devote less space to biological foundations of behavior, learning, and statistics than do introductory college textbooks. But they tend to devote more space to personality, personal problems, and mental health than do college textbooks

(Engle, 21). Engle (22) states that no instance has been reported of a formal laboratory as part of a course requirement in high school psychology.

Many quotations from students and teachers show their enthusiasm for high school psychology (Bryant, 4; Engle, 10; McNeely, 34). High school students rated psychology higher than any other subject field when they rated it in terms of the seven objectives of secondary education as proposed by the Commission on the Reorganization of Secondary Education (Engle, 22). In a survey of 147 teachers from 26 states, Engle (9) found that teachers rated the attitude of their students toward psychology as: "Very Favorable," 53.2%; "Favorable," 38.3%; "About the Same as Other Classes," 8.5%, and none rated it as "Unfavorable" or "Very Unfavorable."

Writers on the subject are practically unanimous that psychology should be taught in high school. Evidence from students and teachers, reflections on the nature of human beings and the educative process have been used to substantiate this position according to Helfant (27). Principals and other educators in Utah generally favor a course in Psychology in high school according to Frandsen (24). And Stanley and Abrams (42) felt that the most important conclusion of their survey was that there is considerably more interest in high school psychology in the Western states than in any other states.

The opinion that psychology should be taught in high schools is not unanimous. Engle (16) found that 10% of 100 members of A.P.A. whom he polled felt that psychology should not be taught in high schools. Some educators listed objections to the inclusion of psychology in the high school curriculum. The objections they listed are: too difficult for high school students, makes students too introspective, places too much emphasis on abnormal phenomena (Engle, 19), not required for college entrance, too much emphasis on theory and not enough on practical application (Engle, 22), no personnel to teach it, an already overcrowded curriculum (Helfant, 27), and the emphasis on science in the curriculum does not allow a place for a course such as psychology (Engle, 21).

The state of high school psychology illuminates many deficiencies or needs listed by writers in the field. Coffield (5) reports that improvement of the field is dependent upon professional psychologists' encouragement of certification of each teacher in the field, professional educators becoming more aware of the importance of the area, district boards of education re-examining the credentials of those teaching psychology with recommendations for improvement of background, and state boards of education accepting the role of leadership in certification. Engle (19) finds that teachers want recommendations for what should be taught in high school psychology, suitable and available teaching materials, non-technical information

on current developments in psychology, further training in psychology, a journal to facilitate communication between psychologists and high school teachers of psychology, and affiliation with A.P.A. He also recommends special college courses for high school psychology teachers (Engle, 8).

Engle (22) points out that teachers in other, more traditional subject areas have their journal literature to which they can turn for assistance, but teachers of psychology often have very little or no journal assistance. They are also lacking the assistance of a professional organization, a state which is not true of other areas.

Generally the writers in the field seem to feel that it is important to teach psychology in high school. Engle (19) says that high school psychology represents the only formal contact with psychology for some students. Only a minority of students ever go on to higher education and a lesser number still ever have an introduction to psychology as a science (Coffield and Engle, 6). In the same article, Coffield and Engle point out the impression obtained in high school is the one carried throughout life and Engle (10) says that whether or not students appreciate psychology and have a critical understanding of popular literature purporting to be psychological may depend on the type of course they had in high school. Rupe (40) says that psychology is a subject that only a school can teach as such. No other agency in the community can do so and high schools have

contact with the greatest number of students.

In spite of the obstacles there seems to be no doubt that interest in high school psychology is growing. Engle (20) asked each member of the Education and Training Board Committee on Psychology in Secondary Schools and each member of the Division 2 Committee on High School Psychology (both committees of the A. P. A.) what is likely to happen or what they would like to see happen in the future of high school psychology. The psychologists generally agreed that a course in psychology should be offered at the senior or junior and senior levels.

But the psychologists were not in agreement as to whether high school psychology should retain its "mental health" orientation rather than adopt a more "scientific" one. While some felt that psychology should fulfill its responsibility in the "mental health" area, others hoped that high school psychology would develop a more scientific approach. Still others proposed two classes; one with a mental health orientation for those students without college plans and a college preparatory scientifically oriented class for college bound students.

The psychologists generally agreed that high school psychology teachers should be better prepared than they are presently. But some psychologists questioned the literature that points to the lack of preparation of high school psychology teachers. They reported

that they had conducted limited surveys in their geographic area and found that the psychology teachers were surprisingly well prepared academically. The general trend of responses to Engle's inquiry seemed to be that summer institutes are the best answer to the upgrading of high school teachers of psychology.

Generally the psychologists felt that the present increase in high school psychology courses is likely to continue and they feel that the A. P. A. should play a leadership role in teacher certification and in the development of course content materials.

Summary

High school psychology in the United States has a long past characterized by student and teacher enthusiasm. The present is somewhat confused. Psychology classes are increasing in number with few guidelines from local, state, or national levels, and psychologists are becoming more concerned about the situation. Two directions have been suggested for the future. State and local school systems could take the situation in hand and make high school psychology consistent with local aims of education; or nation-wide curriculum projects could develop based on the format of curriculum changes in mathematics, foreign languages, and the sciences. The latter seems to be the proposal of members of the A. P. A.

III. PRESENTATION AND INTERPRETATION OF DATA

Introduction

In this study, all teachers of high school psychology in public secondary schools in Oregon as identified by the Oregon State Department of Education received questionnaires. Only two teachers failed to completely fill out the questionnaires. These two questionnaires were usable for all sections except the "Course Content" section which both teachers failed to complete.

Criteria used in this study as measures of high school psychology in Oregon are based on responses by three groups: psychologists, other high school psychology teachers, and the Oregon State Department of Education. Data concerning the psychologists and other high school psychology teachers was taken from a survey conducted by Engle (14) in the spring of 1965 and is the most recent survey reported in the literature. The psychologists are not a random sample of psychologists. Engle sent his questionnaire to 40 psychologists known to be interested in high school psychology. All psychologists had doctors degrees and were members or fellows of the A. P. A. He received 31 usable replies. This group is accepted for the purpose of this study as the expert psychologists in the field of high school psychology. Each member recorded the names of high school psychology teachers who wrote to him requesting

information or assistance. Engle states that these teachers "were interested enough to ask various members of the Division 2 committee for assistance" (14, p. 2). He obtained 130 usable questionnaires and these 130 teachers are considered as experts in the teaching of high school psychology in the United States for the purposes of this study.

The Oregon State Department of Education lists psychology under the Social Science Department and according to the Social Science Department, Mr. Max F. Harriger, a consultant on social science, was the most qualified person to evaluate the questionnaire used in this study as to its appropriateness to high school psychology in Oregon as described by the Guide to Secondary Education in Oregon (36). Mr. Harriger ranked items of both the objectives and course content sections as either "appropriate" or "inappropriate" to high school psychology in Oregon as described by the above guide.

The purpose of this chapter is to present and interpret the data collected during the course of this study. The areas of investigation and order of presentation are as follows:

1. General Nature of the Course
2. Objectives
3. Course Content
4. Teacher Preparation
5. Comparison Between Groups of Oregon Teachers.

General Nature of the Course

Length

Eighteen (48.6%) of the psychology classes in Oregon are two semesters in duration and 19 (51.4%) are one semester. The Oregon State Department of Education describes high school psychology as "A one-semester elective for grades 11 and 12" (36, p. 54). Engle (14) found that 58.5% of his sample taught a one-semester course and 41.5% taught a two-semester course. Of the psychologists surveyed by Engle, 80.6% felt psychology should be a one-semester offering and 19.4% felt that it should last two semesters.

Size of School

Engle (14) reported that 18.5% of the psychology courses surveyed was taught in small high schools. Neither the psychologists nor the Oregon State Department of Education have recommendations on the size of the high school that should offer psychology. In Oregon two high schools (5.4%) with enrollment under 300 teach psychology, 17 high schools (46.0%) with enrollment between 300 and 1000, and 18 (48.6%) with enrollment over 1000.

Department Affiliation

In Engle's survey 10.8% of the psychology classes surveyed

were sponsored by the Science Department of the school, 83.8% were sponsored by the Social Science Department, and 5.4% were in some other situation. Eighteen psychologists (58.1%) recommended that psychology be taught in the Science Department, 12 (38.7%) recommended that it be taught as a Social Science, and one (3.2%) felt that it should be neither. In Oregon, one class (2.7%) is taught in the Science Department, 22 classes (59.5%) are taught under the sponsorship of the Social Science Department, and 14 (37.8%) are taught in some other situation. The Oregon State Department of Education lists psychology as a social science but notes that "Schools offering Psychology may find it very helpful to coordinate the course with their guidance and counseling programs" (36, p. 54). Of the 14 courses in Oregon which are sponsored by neither the Science nor the Social Science Departments, 12 (32.4% of the total) are listed by the teachers as being under the direction of the Counseling Department. Of the courses unaccounted for in the above description, one teacher places himself in the Vocational Department and the other reports that he is in his own department.

Elective or Required

All but three (97.7%) of Engle's sample of teachers reported that psychology was elective in their schools, 93.5% of the psychologists surveyed felt that psychology should be elective, and the

Oregon State Department of Education states that psychology should be a one-semester elective. All psychology classes in Oregon are elective; none are required for graduation.

College Preparatory or Non-college Preparatory

Of the teachers surveyed by Engle (14), 20% reported that their course was primarily for students going to college, 2.3% reported that it was primarily for students not going to college, and 77.7% reported that the course was for students regardless of college plans. Most of the psychologists felt that the course should be for students regardless of college plans (90.3%), two (6.5%) felt that it should be for college bound students, and one (3.2%) felt that it should be for non-college bound students. The Oregon State Department of Education makes no statement regarding the plans of the students taking the course.

Six Oregon teachers (16.2%) report that their course is primarily for students going to college, three (8.1%) report that it is primarily for students not going to college, and 28 (75.7%) report that their course is for students regardless of college plans.

Grade Level of the Students

Engle (19) reports that the results of a 1952 survey of 147 high school psychology teachers in 26 states showed that 62.1% of the

courses were for seniors only, 17.2% for juniors and seniors only, and 1.4% were for sophomores and juniors only. Psychologists feel that psychology should be taught to juniors and seniors (Engle, 21). The Oregon State Department of Education states that Psychology should be an elective for 11th and 12th grades (36). In Oregon, 21 courses (56.8%) are limited to 12th graders only, 13 (35.1%) are limited to 11th or 12th graders, one class (2.7%) has no limit, and one class (2.7%) is limited to 10th, 11th, and 12th graders.

Textbooks

Engle (22) found that the textbooks most often used in high school psychology classes were: Averill (1), Crow and Crow (7), Duvall (8), Engle (17), Geisel (25), Landis and Landis (29), Ruch, Mackenzie and McClean (39), Sorenson and Malm (41), and Woodworth and Sheehan (45). McNeely (34) surveyed Indiana and found that the most frequently used textbook was Engle (17). The psychologists make no statement about the appropriateness of any specific high school text and the Oregon State Department of Education is presently studying high school psychology text books to make recommendations concerning their use.

Some of the Oregon teachers report using more than one textbook. The texts they report using are:

Textbook	Number of Oregon Teachers
Engle (17)	21
Branca (3)	5
Sorenson and Malm (41)	5
Landis and Landis (29)	1
Foster (23)	1
Ruch, Mackenzie, and McClean (39)	1

Seven teachers report that they use no text at all but rely on reading lists and/or lectures.

Number of Psychology Classes Taught

Engle (22) reports that very few teachers teach psychology full time. No statement is made by the psychologists or the Oregon State Department of Education regarding how many classes of psychology a teacher should teach. Three Oregon teachers teach psychology full time. Eleven teachers report teaching only one class, 18 teach two classes, three teach three classes, and two teach four classes.

Objectives

In testing the difference or similarity between the Oregon teachers and the three groups compared: psychologists, national

teacher sample, and Oregon State Department of Education rankings, two tests were used. The information on the psychologists and the national teacher sample was appropriate for the X^2 test. The formula

$$X^2 = \frac{(M_1 - M_2)^2}{s^2/n}$$

was used (Li, 30, p. 85) where M_1 is the mean of the sample, M_2 is the mean of the Oregon teachers, s^2 is the variance of the Oregon teachers, and n is the number of the Oregon teachers. This formula yields a X^2 distribution with one degree of freedom. The .05 level of confidence, $X^2 > 3.841$, was accepted as significant.

Because the data obtained from the Oregon State Department of Education was not appropriate for the X^2 test, the three criteria were also measured by the Spearman Rank Correlation Coefficient test, r_s. In order to show correlation greater than zero at the .05 level of confidence, r_s must be greater than .714.

Inferences will be drawn from both statistics. The X^2 statistic allows comparison of the individual objectives while the Spearman Rank Correlation Coefficient will be used to determine which criterion sample is the best predictor of psychology as taught in Oregon high schools.

Table I is a copy of the Aims and Objectives section of the questionnaire filled out by all of the groups in this survey. In this paper the underlined portion of the objective will be used to refer to the whole objective but the reader is cautioned that the underlined portion does not completely describe the objective.

Psychologists

In Table II, the column headed "Rank" was obtained by ordering the mean ranks and assigning absolute ranks from 1 to 7. The "Mean" column is the mean of both groups and the "Deviation" column refers to the standard deviation. The "X^2" column reports the results of the X^2 test using the formula discussed previously. This same method will be used to present data in other tables in this section.

It can be seen by examining Table II that the psychologists are an inadequate predictor of the objectives for psychology courses taught in Oregon in all but the Vocational and Social Relations objectives. The objectives that the psychologists rank significantly more important are Learning and Scientific. They rank the Family Living, Philosophy of Life, and Personal Problems objectives significantly lower than do the Oregon teachers.

In considering the absolute rankings of the two groups, a Spearman Rank Correlation Coefficient of .071 was found. The

Table I. Aims and Objectives Section of the Questionnaire.

A preliminary survey of high school course outlines has suggested seven major objectives or aims for the course. Keeping in mind the objectives that you have for your course, please rank the following objectives from one (1) for the objective you feel is most important to seven (7) for the one you feel is least important.

OBJECTIVES

(a) To assist the student in deciding on a vocational objective and in preparing for his or her vocational life.

(b) To give the student a frame of reference for understanding social relationships, including the forces that tend to create social disorder and how psychological principles can be applied in dealing with such forces.

(c) To develop an understanding of learning processes and to increase study efficiency; to guide students into patterns of critical and creative thinking.

(d) To assist students in preparing for family living, including some understanding of the qualitative aspects of heterosexual relationships and of basic principles of child rearing.

(e) To assist students in developing a basic philosophy of life, such as needs, values, goals, and possible contribution to cultural advancement.

(f) To develop in the student an appreciation for psychology as a field of scientific knowledge, including a fundamental technical vocabulary and familiarity with basic research methods; to stimulate curiosity concerning problems of behavior.

(g) To develop in the student an understanding of an appreciation for the uniqueness of the individual and to apply psychological principles to the solution of his personal problems so that he may live harmoniously with others.

relationship between these two groups cannot be said to differ significantly from zero.

Table II. Objectives: Comparison of a National Sample of Psychologists with Oregon Teachers.

	Oregon Teachers			Psychologists			
Objective	Rank	Mean	Deviation	Rank	Mean	Deviation	X^2
Vocational	7	5.57	1.70	7	5.80	1.53	.677
Social Relations	3	2.97	1.13	2	2.54	1.38	.535
Learning	5	4.70	1.48	3	3.70	1.59	16.894*
Family Living	4	4.27	1.39	6	5.00	1.58	10.216*
Philosophy of Life	2	2.95	1.60	5	4.38	1.67	39.202*
Scientific	6	5.03	2.09	1	2.35	1.85	60.810*
Personal Problems	1	2.11	1.18	4	4.19	1.74	115.163*

*Significant at the .05 level, $X^2 > 3.841$.

National Teacher Sample

Table III shows that the national teacher sample is an inadequate predictor of the objectives for Oregon high school psychology courses in all areas except the Personal Problems area. The national teacher sample ranks the Vocational, the Social Relations, the Family Living, and the Philosophy of Life objectives as significantly less important than do the Oregon teachers. The sample ranks the Learning and Scientific objectives as significantly more important than the Oregon teachers do.

Considering only the absolute ranks and using the Spearman test, the two groups correlate .571, a coefficient not significantly different from zero.

Table III. Objectives: Comparison of a National Sample of Teachers with Oregon Teachers.

	Oregon Teachers			Nation Teacher Sample			
Objective	Rank	Mean	Deviation	Rank	Mean	Deviation	X^2
Vocational	7	5.57	1.70	7	6.20	1.25	5.081*
Social Relations	3	2.97	1.13	3	3.50	1.71	8.120*
Learning	5	4.70	1.48	5	4.10	1.60	6.082*
Family Living	4	4.27	1.39	6	4.73	1.49	4.056*
Philosophy of Life	2	2.95	1.60	4	3.64	1.80	6.881*
Scientific	6	5.03	2.09	2	3.39	2.13	22.751*
Personal Problems	1	2.11	1.18	1	2.40	1.46	2.239

*Significant at the .05 level, $X^2 > 3.841$.

Oregon State Department of Education

Table IV reports the classification which Mr. Max F. Harriger placed on the objectives section of the questionnaire sent to the Oregon teachers. If the teachers in Oregon followed the objectives of high school psychology in Oregon as interpreted by Mr. Harriger for the Oregon State Department of Education, it could be expected that they would rank the four "appropriate" objectives with some mean ranking less than four and the three "inappropriate" objectives

with some mean ranking greater than four. Table IV shows that this is the situation in all areas except the Scientific area which Mr. Harriger indicates is appropriate but which the teachers in Oregon rank as 5.03 for a mean rank and 6 as an absolute rank.

Using the Spearman test on the two sets of data and averaging the Oregon State Department of Education ranks for appropriate as 2.5 and for inappropriate as 6.0, a coefficient of correlation of .574 was obtained corrected for ties. The correlation between these two sets of data is not significantly different from zero.

Table IV. Objectives: Comparison of the Oregon State Department of Education with Oregon Teachers.

	Oregon Teachers			Department of Education	
Objective	Rank	Mean	Deviation	Classification	Rank
Vocational	7	5.57	1.70	Inappropriate	6.0
Social Relations	3	2.97	1.13	Appropriate	2.5
Learning	5	4.70	1.48	Inappropriate	6.0
Family Living	4	4.27	1.39	Inappropriate	6.0
Philosophy of Life	2	2.95	1.60	Appropriate	2.5
Scientific	6	5.03	2.09	Appropriate	2.5
Personal Problems	1	2.11	1.18	Appropriate	2.5

Summary

The results of the Spearman test show that none of the three groups used as measures of psychology in Oregon are significantly correlated with the Oregon teachers when considering objectives. The objectives stressed in high school psychology classes in Oregon are not like those stressed or considered to warrant emphasis by the three criterion groups.

Considering the individual objectives, all three groups indicate that they would stress the Scientific objective to a significantly greater degree than the Oregon teachers do. Both the psychologists and the national teacher sample disagree with the emphasis placed by the Oregon teachers on the Learning, Family Living, and Philosophy of Life objectives. There is no area where all three criterion groups agree with the Oregon teachers.

Course Content

Table V is a copy of the course content section of the questionnaire filled out by all the groups considered in this study. The underlined portion of the course content area will be used to refer to the whole area in this study. The reader is once again cautioned that the underlined portion does not completely describe the whole course content area. The X^2 formula described in the previous section of

Table V. Course Content Section of the Questionnaire.

A preliminary survey of high school psychology course outlines has suggested the following nine subject matter areas. Realizing that a course which would completely cover all these nine areas would take much longer than one year, please list the approximate number of weeks you spend on each area. If you spend no time in a certain area, please put zero (0). Try to make the number of weeks spent total eighteen (18) if you teach a one-semester course or thirty-six (36) if you teach a full-year course.

SUBJECT MATTER AREA

(a) Biological background of behavior (such as mechanisms of heredity, the nervous system, glandular systems).

(b) Individuality (such as differences in intellectual ability, achievement, aptitudes, personality).

(c) Learning and thinking (such as classical conditioning, operant conditioning, remembering and forgetting, problem solving, creative thinking, efficiency of learning).

(d) Maturation and development (such as physical and behavioral development in infancy, babyhood, childhood, adolescence, adulthood, and old-age).

(e) Mental health (such as conflicts and frustrations, defense mechanisms, problems of personal adjustment, psychoneuroses, psychoses).

(f) Motivated and emotional behavior (such as drives, personal-social motives, emotional motivation, emotional states).

(g) Sensation and perception (such as the various senses, attending, perception of objects, perceptual constancy).

(h) Social behavior (such as attitudes, beliefs, propaganda, social groups, working with others).

(i) Statistical methods and measurement (such as measurements of central tendency and variability, scales, distributions of measurements, correlation).

this chapter and the Spearman Rank Correlation test are used to measure the difference or similarity between the groups in this section.

Psychologists

Table VI is a comparison between the Oregon teachers and the psychologists on course content areas. In the table, "Mean" refers to the average number of weeks out of a possible 36 that the Oregon teachers spend on a specific area or that the psychologists feel should be spent on a specific area.

Table VI. Course Content: Comparison of a National Sample of Psychologists with Oregon Teachers.

Course Content Area	Oregon Teachers			Psychologists			X^2
	Rank	Mean	Deviation	Rank	Mean	Deviation	
Biological	7	3.03	1.87	6	3.39	2.84	1.296
Individuality	2	5.14	2.83	4	5.20	5.20	.016
Learning and Thinking	4	4.40	2.74	1	7.45	1.90	45.073*
Maturation and Development	5	3.97	3.40	3	5.42	2.13	12.354*
Mental Health	1	6.83	4.80	7.5	2.03	2.40	35.000*
Motivated and Emotional Behavior	6	3.63	1.84	2	5.65	1.75	42.126*
Sensation and Perception	8	2.60	1.47	7.5	2.03	2.48	5.264*
Social Behavior	3	4.46	2.59	5	3.62	2.15	3.680
Statistical Methods	9	1.94	1.40	9	1.00	1.93	15.778*

*Significant at the .05 level, $X^2 > 3.841$.

Table VI shows that the Oregon teachers and the psychologists are not significantly different in their emphasis in three areas, Biological, Individuality, and Social Behavior. Both groups seem to agree that the Individuality and Social Behavior areas are relatively important while the Biological area is not. However, the psychologists feel that more time should be spent in the Learning and Thinking, Maturation and Development, and Motivated and Emotional Behavior areas than the Oregon teachers spend. The psychologists feel that significantly less time should be spent in the Mental Health, Sensation and Perception, and Statistical Methods areas than the Oregon teachers actually spend.

Ordering the mean number of weeks for both groups and assigning 1 to greatest number of weeks and 9 to the fewest, a Spearman Rank Correlation Coefficient can be computed. The correlation between the two groups is $r_s = .329$. Since r_s must be greater than .600 to show correlation at the .05 level of confidence, the correlation between these two groups cannot be said to be greater than zero.

National Teacher Sample

Table VII reports the comparison between the Oregon teachers and the national sample of teachers. There is no significant difference between the two groups considering time spent in the

Biological, Individuality, Maturation and Development, and Mental Health areas. The national teacher sample spends significantly less time in the Sensation and Perception, Social Behavior, and Statistical Methods areas.

Table VII. Course Content: Comparison of a National Sample of Teachers with Oregon Teachers.

Course Content Area	Oregon Teachers			National Teacher Sample			X^2
	Rank	Mean	Deviation	Rank	Mean	Deviation	
Biological	7	3.03	1.87	6	3.40	2.31	1.396
Individuality	2	5.14	2.83	2.5	5.60	2.25	.924
Learning and Thinking	4	4.40	2.74	4	5.40	2.06	4.660*
Maturation and Development	5	3.79	3.40	5	4.20	1.95	.509
Mental Health	1	6.83	4.80	1	5.80	1.99	1.565
Motivated and Emotional Behavior	6	3.63	1.84	2.5	5.60	1.98	40.068*
Sensation and Perception	8	2.60	1.47	8	2.00	2.00	5.833*
Social Behavior	3	4.46	2.59	7	3.20	2.58	8.281*
Statistical Methods	9	1.94	1.40	9	1.00	1.48	15.778*

*Significant at the .05 level, $X^2 > 3.841$.

Applying the Spearman test to the data in Table VII yields a correlation coefficient of .754. Correlation between the two groups may be said to differ significantly from zero in the order of importance they place on subject matter areas.

Oregon State Department of Education

Table VIII compares the ranking of the course content areas by the Oregon State Department of Education (represented by Mr. Max F. Harriger) with that given by the Oregon teachers. This ranking by the Oregon State Department of Education only indicates whether the course content area is "appropriate" or "inappropriate" to high school psychology as described by the Guide to Secondary Education in Oregon (36). Since there are nine course content areas and approximately 36 weeks in a full school year, it can be assumed that an average amount of time spent on a course content area would be four weeks. If the Oregon teachers followed the Oregon State Department of Education recommendation, it could be expected that the teachers in Oregon would spend a number of weeks greater than four on those course content areas marked appropriate by the Oregon State Department of Education and a number of weeks less than four on those areas marked inappropriate.

An examination of Table VIII reveals that this expectation is true in all areas except two. The Oregon State Department of Education indicates that the Biological area is appropriate but the Oregon teachers spend only 3.03 mean weeks in instruction. The Oregon teachers spend a mean number of 4.40 weeks instructing in the Learning and Thinking area but the Oregon State Department of

Education marks this area as inappropriate.

Table VIII. Course Content: Comparison of the Oregon Teachers with the Oregon State Department of Education.

Course Content Area	Oregon Teachers			Department of Education	
	Rank	Mean	Deviation	Classification	Rank
Biological	7	3.03	1.87	Appropriate	2.5
Individuality	2	5.14	2.38	Appropriate	2.5
Learning and Thinking	4	4.40	2.74	Inappropriate	7
Maturation and Development	5	3.79	3.40	Inappropriate	7
Mental Health	1	6.83	4.80	Appropriate	2.5
Motivated and Emotional Behavior	6	3.63	1.84	Inappropriate	7
Sensation and Perception	8	2.60	1.47	Inappropriate	7
Social Behavior	3	4.46	2.59	Appropriate	2.5
Statistical Methods	9	1.94	1.40	Inappropriate	7

Appropriate rankings by the Oregon State Department of Education were assigned numerical ranks equal to the average of ranks 1, 2, 3, and 4. Inappropriate ranks were assigned numerical ranks equal to the average of ranks 5, 6, 7, 8, and 9. A Spearman coefficient of correlation was computed on the data and yielded $r_s = .973$ corrected for ties. Correlation between the two groups may be said to differ significantly from zero in the order of importance they place on subject matter areas examined in this study.

Summary

In only the Individuality area do all three criterion groups agree with the emphasis by the Oregon teachers. Only in the Learning and Thinking area do all three groups disagree with the Oregon teachers. The psychologists and the national teacher sample indicate significantly more time should be spent in the Learning and Thinking area, while the Oregon State Department of Education indicates less time should be spent than the Oregon teachers actually spend.

Using the Spearman test, two of the criterion groups are similar to the Oregon teachers at a statistically significant level; the national teachers sample and the Oregon State Department of Education. Both of these groups are adequate predictors of the content of psychology as taught in Oregon while the psychologists are not.

Teacher Preparation

Teaching Experience

Teachers of high school psychology in the United States are generally the more experienced teachers. Engle (15) found that 71% of the teachers he surveyed had more than five years teaching experience. Neither the psychologists nor the Oregon State Department of Education put any requirements on the experience of the teachers

teaching high school psychology. In Oregon, 67.6% of the teachers have more than five years teaching experience. In Table IX, column two, general teaching experience, is reported the number of years teaching experience possessed by the Oregon teachers.

Table IX. Teaching Experience of Oregon Teachers.

	Number of Oregon Teachers	
Number of Years	General Teaching Experience	Psychology Teaching Experience
1	3	16
2	1	8
3	4	9
4	3	2
5	1	0
6	2	0
7	6	1
8	2	0
9	1	0
10 or over	14	1

Table IX also reports the number of years the Oregon teachers have been teaching high school psychology. Only two teachers (5.4%) have been teaching psychology more than five years. More than half of the teachers have been teaching psychology two years or less counting the present year.

Other Courses Taught

As was reported previously, three Oregon teachers teach psychology full time. Engle (22) reports that more than half of the psychology teachers engage in other psychological work such as counseling or testing. The subjects that they most frequently teach in addition to psychology are social science, science, and mathematics. One third of the teachers are also serving as principals or vice-principals. Oregon State Department of Education lists psychology under the heading of social science but it also recommends that the course be coordinated with the counseling department. The courses the Oregon teachers teach in addition to psychology are listed in Table X. Some teachers serve in more than one other area so the total does not equal the number of Oregon teachers reporting.

Table X. Other Courses Taught by Oregon School Psychology Teachers.

Subject or Position	Number of Teachers	Subject or Position	Number of Teachers
Counselor	17	Western Civilization	2
Modern Problems	6	Coach	2
Vocational Education	4	Mathematics	2
U. S. History	3	Business Education	1
English	3	Teacher of Mentally Retarded	1
Physical Education	3	Elementary Principal	1
Vice Principal	3	Music	1

Academic Preparation

Engle (15) found that the mean number of semester hours of preparation in psychology (considering all courses) of the teachers he sampled was between 15 and 25 semester hours, probably closer to 15 than 25. (This would be between 22.5 and 37.5 quarter hours, the unit used for the Oregon teachers.) Oregon teachers average 17.5 quarter hours considering all psychology courses taken.

Engle (16) reports that between 60% and 75% of the high school psychology teachers have Masters degrees or better. In Oregon, 23 teachers (62.2%) have Masters degrees or better.

When 100 members of the A.P.A. were asked for recommendations concerning the preparation of high school psychology teachers, they set the requirements so high that most teachers could not be induced to meet them (Engle, 15). K. E. Coffield (5) surveyed psychologists and developed a list of ten specific courses that over 50 percent of the psychologists recommended as preparation. Table XI compares the preparation of the Oregon teachers to that list.

As can be seen by Table XI, most teachers have had General Psychology, Educational Psychology, and Adolescent Psychology. Fewest have had courses in Advanced General Psychology and Experimental Psychology.

Table XI. Number of Oregon Teachers Who have Taken Specific Courses Recommended by Coffield (5).

Course	Number of Teachers	Course	Number of Teachers
General Psychology	36	Experimental Psychology	11
Adolescent Psychology	31	Personality	16
Educational Psychology	33	Mental Health	15
Psychology of Learning	18	Statistics	26
Social Psychology	20	Advanced General Psychology	10

The Oregon State Department of Education states, "School districts which elect to offer this course should make certain to select a teacher who has preparation equivalent to norms required in other areas or not offer it" (36, p. 54). Mr. Grant Mills, head of the Certification Department of the Oregon State Department of Education was asked to clarify this statement. Mr. Mills stated that this was very difficult to interpret in terms of an exact number of hours in psychology required to teach the course. A mathematics teacher must have at least 12 quarter hours of preparation to teach General Mathematics, but a high school geography teacher could conceivably have as few as three quarter hours preparation in geography and be qualified by state standards to teach that course. Mr. Mills pointed out that the principal of a school must be able to defend his teacher assignment to the State Department of Education and if

this were not acceptable, basic school support money could be withheld.

However, since General Psychology or its equivalent is required as basic preparation for teachers in Oregon, then any teacher who holds a valid secondary school teaching certificate in Oregon is certified by the Oregon State Department of Education's requirements to teach psychology in Oregon secondary schools. Using this as a criterion, all the teachers in the present study can be presumed to be certified to teach high school psychology in Oregon.

Summary

It seems to be very difficult to establish certification requirements for teachers of high school psychology. Psychologists generally seem to want to set the standards too high for psychology teachers to meet. The Oregon State Department of Education makes no effective statement concerning required preparation. Yet Oregon teachers are prepared to some degree. Only one teacher had none of the courses recommended by Coffield (5).

Comparison Between Groups of Oregon Teachers

In the following section, various groups of Oregon teachers are examined for their correlation. The Spearman Rank Correlation Coefficient (r_s) was computed for each set of data. In

comparing the objectives of two groups r_s must be greater than .714 to show correlation significant at the .05 level of confidence. For the course content comparisons, r_s must be greater than .600 to show significant correlation at the .05 level of confidence. The means and absolute ranks for the data reported will be found in Appendix B. In comparing the groups on objectives the number of cases always equals 37, the number in the study. However, the number of cases compared on course content equals 35 since two teachers did not report this information.

Since only two schools reported enrollment of under 300 students, these two schools were considered as schools with under 1000 enrollment when making the following comparison. Large schools (over 1000 enrollment, $n = 18$) were compared with small schools (1000 or under enrollment, $n = 19$) and yielded a correlation of $r_s = .821$ for the ranking of their objectives and $r_s = .933$ for the ranking of their course content. Since both of these correlations are significant at the .05 level of confidence, the size of the school in which psychology is taught in Oregon is not a differential factor in determining either course content or objectives.

Some psychology classes in Oregon are one semester in length ($n = 19$) and some are two semesters ($n = 18$). When these two groups were compared using the Spearman test, $r_s = .955$ for the objectives and .843 for the course content. One-semester and two-

semester courses are essentially similar in Oregon in terms of both objectives and course content.

Twenty-one Oregon psychology teachers who have taught psychology for more than one year were classified as experienced teachers and were compared to 16 teachers who were teaching psychology for the first time in the 1966-67 school year. The correlation between objectives was found to be .955 and between course content, .607. Since both of these correlations are significant at the .05 level of confidence, experience of the teacher does not seem to change either the objectives or the course content in psychology classes in Oregon.

The better prepared teachers were defined as those having taken more than half of the specific academic courses recommended by Coffield (5) and the more poorly prepared teachers are defined as those who have taken half or fewer of the courses. A comparison of these two groups yielded $r_s = .857$ for objectives and $r_s = .683$ for course content. The number of courses the teacher has taken from Coffield's recommended list seems to have little influence on the objectives or course content of the psychology classes in Oregon.

Seventeen of the psychology teachers in Oregon are also counselors. Since the Oregon State Department of Education recommends that the psychology classes in Oregon be coordinated with the counseling department, it was decided to compare the psychology

teachers who were also counselors with the other psychology teachers. Results of the comparison of objectives of the two groups are $r_s = .964$; of the course content, $r_s = .667$. Whether or not the psychology teacher is a counselor seems to have little influence on the nature of objectives or course content of the psychology classes.

Some of the teachers reported that their classes were primarily for students going to college, some reported that their classes were primarily for students not going to college, and some reported that their classes were for students regardless of college plans. These three groups were compared with each other. It is noted that 28 of the classes are for students regardless of college plans (all students), while only six are primarily for students going to college and three are primarily for students not going to college. The following correlations were obtained:

	Objectives	Course Content
All students with college bound students	$r_s = .857$*	$r_s = .521$
All students with non-college bound students	$r_s = .205$	$r_s = .558$
College bound with non-college bound students	$r_s = .045$	$r_s = .479$

*Significant at the .05 level of confidence.

There is a significant correlation between the objectives of classes that are for college bound students and those that are for all students, but not between the course content for the two groups. The "all student" group does not correlate with the "non-college" group in either category. The classes for college bound students are not similar to the non-college bound when comparing either objectives or the course content.

Summary

Except for the final group reported, similarity was found for both objectives and course content for all the groups compared. No evidence can be cited from the above correlations to indicate any possible cause of rankings of course content and objectives for the psychology classes in Oregon high schools.

IV. SUMMARY, CONCLUSIONS, RECOMMENDATIONS

The information in this final chapter is organized under the following headings:

1. Restatement of the Problem
2. Review of the Procedure
3. Major Findings and Conclusions
4. Implications of the Findings
5. Recommendations for Further Research

Restatement of the Problem

High school psychology has been taught in some schools in the United States since 1885 (Coffield and Engle, 6). Students and teachers are enthusiastic about the course (Bryant, 4; Engle, 9, 10, 22; McNeely, 34). There is little agreement among the teachers of high school psychology as to what should be taught in the course (Engle, 14). Also there is little training available in colleges for teachers of high school psychology (Stanley and Abrams, 43).

The present study attempts to examine the status of high school psychology in the state of Oregon. Oregon high school psychology is compared with (1) general information from the literature, (2) information obtained from a survey of 130 high school psychology teachers in the United States, (3) information obtained from 31

psychologists known to be interested in high school psychology (Engle, 13, 14), and (4) information obtained from the Oregon State Department of Education.

Review of the Procedure

A questionnaire was developed, validated, and sent to 37 teachers of high school psychology in Oregon as identified by the Oregon State Department of Education. All teachers returned the questionnaire.

The results of the questionnaire were compared with:

1. The results of a similar questionnaire filled out by 31 psychologists known to be interested in high school psychology (Engle, 13, 14)
2. The results of a similar questionnaire completed by 130 high school psychology teachers in the United States (Engle, 13,14)
3. Information obtained from the Oregon State Department of Education.

The Chi Square test was used to compare the differences between the Oregon teachers and the psychologists and between the Oregon teachers and the national teacher sample on the "objectives" and "course content" sections of the questionnaire. This statistic was computed in order to make statements about the significance of

the differences between the Oregon teachers and the two samples concerning their emphasis on specific objectives or course content areas.

The data received from the Oregon State Department of Education was not appropriate for a Chi Square test since the Oregon State Department of Education, represented by Mr. Max F. Harriger, marked the objectives and course content areas only as "appropriate" or "inappropriate" to high school psychology in Oregon. However, the data could be ranked and the Spearman Rank Correlation Coefficient was computed for the Oregon State Department of Education data and the data obtained from the two samples. This was done to determine which sets of data were correlated with the rankings by the Oregon teachers.

Finally, the data provided by Oregon teachers was divided into groups based on size of school, length of the course, experience of the teachers in teaching high school psychology, preparation of teachers, whether the teachers were counselors or non-counselors, and the future plans of the students. The Spearman test was computed on these groups to discover similarities or lack of similarities between these groups.

Major Findings and Conclusions

In Chapter I, a list of questions to be answered by this study

was presented. These questions will be restated here with answers based on the data from the study.

Question 1. Are the objectives and the course content suggested by the Oregon State Department of Education reflected by the high school psychology classes taught in the State of Oregon?

In considering a comparison of information from the Oregon State Department of Education with the psychology classes in Oregon, this study revealed the following:

a. Although the Oregon State Department of Education states that psychology should be a one-semester course, 18 classes (48.6%) are two semesters in length.

b. The Oregon State Department of Education lists psychology as a social science but recommends that it be coordinated with the Counseling Department of a school. In practice, 34 of the 37 classes (91.9%) are under the direction of either the Social Studies or Counseling Department.

c. All of the classes in Oregon are elective as the Oregon State Department of Education suggests.

d. Oregon State Department of Education states that psychology should be offered to eleventh and twelfth graders. In only three classes in Oregon is it possible for tenth graders to enroll; all other classes are limited to twelfth graders or eleventh and twelfth graders.

e. A Spearman Rank Correlation Coefficient was computed to compare the ranking of objectives for the psychology class between the Oregon State Department of Education and the Oregon teachers. A correlation of .574 was obtained which is not significantly different from zero at the .05 level of confidence. The Oregon State Department of Education seems to feel that the Oregon teachers should place more emphasis on the Scientific Objective than they do and less importance on the Family Living objective.

f. Comparison of the rankings of course content areas for the two groups yielded $r_s = .973$. The two groups show a similarity at a statistically significant level in their ranking of subject matter areas to be stressed. In only two areas was there any disagreement, Biological and Learning and Thinking. The Oregon State Department of Education seems to feel that Oregon teachers should spend more time in the Biological area and less time in the Learning and Thinking area than they actually do.

Question 2. Are the teachers prepared to teach psychology in accordance with the preparation suggested by the Oregon State Department of Education?

The answer to this question must be, they are. Although the Guide to Secondary Education in Oregon states, "School districts which elect to offer this course should make certain to select a teacher who has preparation equivalent to norms required in other

areas or not offer it." (36, p. 54), clarification of the statement by the Teacher Certification Department reveals that in some cases a teacher could teach another course with as few as three hours preparation. Since Introductory Psychology or its equivalent is required for a teaching certificate in Oregon, all teachers who hold valid teaching certificates in Oregon could be certified to teach high school psychology.

Question 3. Is the high school psychology course offered in Oregon similar to high school psychology offered in a sample of courses in the United States?

Considering information from the literature and from the survey of 130 high school psychology teachers conducted by Engle (13, 14) and comparing this information with the data from the Oregon teachers revealed the following:

a. The general nature of the psychology classes in Oregon is about the same as those taught in the rest of the United States. In the area of department affiliation there is an outstanding difference. Only in Oregon is psychology taught under the direction of the Counseling Department, and 12 of Oregon's 37 teachers report being under this department's direction. Nowhere else in the literature is this situation reported.

b. Comparing the mean ranking of objectives for the two groups reveals significant difference in all objectives except the

Personal Problems objective. Both groups rank this objective as most important. The national sample of teachers places more importance on the Scientific and the Learning objectives than the Oregon teachers do. They emphasize Vocational, Social Relations, Family Living, and Philosophy of Life objectives less than the Oregon teachers do.

Using the Spearman test and comparing only the absolute ranks of the two groups yields a correlation of .571 which is not different from zero at the .05 level of significance. In the ranking of their objectives for the psychology class, Oregon teachers are different from the national sample of teachers.

c. A comparison of the content of the courses for the two groups reveals greater similarity. There is no difference between the two groups in the time they spend teaching the Biological, Individuality, Maturation and Development, and Mental Health course content areas. The national sample of teachers spends significantly more time teaching the Learning and Thinking and the Motivated and Emotional Behavior areas. They spend less time teaching in the Sensation and Perception, Social Behavior, and Statistical Methods areas.

Ordering the means of the two groups to obtain an absolute rank and comparing these absolute ranks yields a Spearman Correlation Coefficient of .754 which is significant at the .05 level of

confidence. The order of importance is similar to a statistically significant degree for the two groups.

Question 4. Is the high school psychology course offered in Oregon similar to the course recommended by a sample of psychologists in the United States?

Considering information from the literature and from the survey of 31 psychologists conducted by Engle (13, 14) and comparing this information with the data from the Oregon teachers, the following was revealed:

a. Of the psychologists polled by Engle, 80.6% felt that psychology should be a one-semester offering. In Oregon, 48.6% of the courses last for two semesters.

b. In Oregon, one class (2.7%) is under the direction of the Science Department but 58.1% of the psychologists polled by Engle felt that psychology should be under the direction of the Science Department.

c. Examining the ranking of objectives for the psychology classes of the two groups reveals that they are similar in the emphasis they place on the Vocational and Social Relations objectives. But the psychologists would place significantly more emphasis on the Learning and Scientific objectives and significantly less emphasis on the Family Living, Philosophy of Life, and Personal Problems objectives.

In considering the absolute rankings of the two groups, a Spearman Rank Correlation Coefficient of .071 was found. The relationship between these two groups cannot be said to differ significantly from zero.

d. Comparing the emphasis the psychologists would suggest on course content areas with the actual emphasis reported by the Oregon teachers reveals no significant difference in the Biological, Individuality, and Social Behavior areas. But the psychologists recommend significantly more emphasis in the Learning and Thinking, Maturation and Development, and Motivated and Emotional Behavior areas. They propose significantly less emphasis be placed in the Mental Health, Sensation and Perception, and Statistical Methods areas.

Comparing the absolute ranks of the two groups on course content areas with the Spearman test yields a correlation coefficient of .329 which is not significantly different from zero at the .05 level of confidence. The psychologists and the Oregon teachers do not agree concerning which are the important course content areas for high school psychology.

Question 5. Are the Oregon high school psychology teachers prepared in accordance with preparation recommended by psychologists in the United States?

Although psychologists tend to set their recommended

preparation for high school teachers so high that most high school teachers could not be induced to meet them (Engle, 15), K. E. Coffield (5) developed a list of ten courses that most of the psychologists he surveyed recommended. If adequate preparation is defined as formal course work in all of these subjects, then only two of the Oregon teachers are adequately prepared academically. But 21 of the teachers have taken more than half of the courses recommended by Coffield. It is very difficult to make statements about the adequacy of preparation of the Oregon teachers until accepted standards are developed by certifying agencies.

In addition to considering the previous questions, this study examined various groups of the Oregon teachers to try to discover relationships between the objectives and course content and some other variable. The psychology courses were divided into two sets based on size of the school, length of the course, experience of the teachers in teaching high school psychology, preparation of the teachers, whether the teachers were counselors or non-counselors, and future plans of the students. The Spearman test was used to compare the data on the groups. Except for the last mentioned comparison, no significant difference was discovered between any of the groups. No matter how the teachers were divided, their rankings of objectives and course content areas were not significantly different than zero at the .05 level of confidence.

There was some difference when future plans of the students were considered. Some courses in Oregon were described by the teachers as for all students regardless of college plans (N = 28), some primarily for students going to college (N = 6), and some primarily for students not going to college (N = 3). The following correlation coefficients were obtained:

	Objectives	Course Content
All students with college bound students	$r_s = .857$*	$r_s = .521$
All students with non-college bound students	$r_s = .205$	$r_s = .558$
College bound with non-college bound students	$r_s = .045$	$r_s = .479$

*Significant at the .05 level of confidence.

On the basis of the above information, it can be seen that courses primarily for students going to college are similar in their objectives to courses for all students. Perhaps the similarity is a function of a general college orientation of Oregon's high schools. But in no other comparison is the similarity among the three groups significantly different from zero.

Implications of the Findings

1. The weight of opinion seems to be that high school psychology should be a one-semester offering. Both the psychologists and the Oregon State Department of Education seem to feel that this amount of time is adequate for the material that should be covered in high school psychology. If this opinion is correct, then about half of the Oregon teachers could be doing a more effective job by teaching a shorter course. They could be more effective because they could obtain the same results and more students could have the opportunity of taking psychology.
2. The Oregon teachers are not similar to any of the three criterion groups when considering ranking of objectives. But they are similar to both the Oregon State Department of Education and the national teachers sample when emphasis on course content area is considered. A possible explanation of this fact could be that objectives are developed by individual teachers more from an understanding of the needs of their particular student population than from a knowledge of the subject matter. When developing the content of a course, generally some outside sources are relied upon. The similarity of the course

content areas could be a function of the similarity of the outside sources relied upon.

Perhaps an organization of high school psychology teachers in Oregon would foster communication that would result in the objectives of the course becoming more similar. The literature points to a need for an organization of high school psychology teachers and notes attached to the questionnaires for this study from Oregon teachers indicate that some of the teachers feel that this need exists in Oregon.

3. Academic preparation of high school psychology teachers is a much neglected area. No accrediting agency at the present time is taking leadership and establishing certification requirements specifically for high school psychology teachers. Until this is done in Oregon, there will be no adequate measure of the qualifications of psychology teachers.

Presently, the diversity of preparation of the Oregon teachers would seem to justify some program of in-service training such as a summer institute for teachers of high school psychology in Oregon. Not only could a prolonged in-service training program broaden the psychological background of the teachers and bring them up to

date on the new developments in the field, it might also be the basis for an organization of high school psychology teachers in Oregon. Knowledge gained from developing and presenting such an institute could be the basis for developing certification requirements for teachers of high school psychology in Oregon. If not an institute, at least a course in methods and materials for high school psychology could be developed. Such a course could be taught in one of our state colleges in the summer and publicized to teachers of high school psychology in Oregon. The fundamentals of psychology could be reviewed, new developments could be investigated, and methods and materials appropriate to high school students could be examined. The course could also evaluate present periodicals in psychology to select those most helpful to high school teachers. This activity might encourage teachers to subscribe to these publications in order to keep current in the field of psychology.

Recommendations for Further Research

1. The Oregon State Department of Education suggests that psychology be coordinated with the Counseling Department of a high school. A study could be conducted to examine

how this is done and what are the values and limitations.

2. A study could be conducted to determine what type of students take high school psychology and what type do not.
3. A study could be conducted to determine if high school psychology is as effectively taught in one-semester as in two-semester courses.
4. A study could be conducted on the high school psychology teachers themselves; how or why they started teaching psychology, what values they receive from teaching the course, and what value they feel the students receive from the course.
5. A study could be conducted to determine the needs of high school students that relate to psychology; what objectives are most appropriate, what course content areas are most appropriate, and what methods of presentation are most appropriate in terms of student statements of their needs. Such a study could be the basis for proposing curriculum changes in high school psychology.

BIBLIOGRAPHY

1. Averill, Lawrence A. Introductory psychology. New York, Macmillan, 1943. 564 p.

2. Belensky, Robert. Guidance and the teaching of high school psychology. Community Mental Health Journal 2: 41-46. Spring 1966.

3. Branca, Albert A. Psychology, the science of behavior. Boston, Allyn and Bacon, 1964. 584 p.

4. Bryant, L. W. Exploratory psychology course for teenagers. Bulletin of the National Association of Secondary School Principals 41: 75-79. Nov. 1957.

5. Coffield, Kenneth E. Suggested standards for teachers of high school psychology. Bulletin of the National Association of Secondary School Principals 43:200-203. Sept. 1959.

6. Coffield, Kenneth E. and T. L. Engle. High school psychology: a history and some observations. American Psychologist 15: 350-352. 1960.

7. Crow, Alice and L. D. Crow. Learning to live with others. Boston, Heath, 1944. 284 p.

8. Duvall, Evelyn R. Family living. New York, Macmillan, 1950. 410 p.

9. Engle, T. L. Attitudes of teachers and pupils toward a high school course in psychology. Bulletin of the National Association of Secondary School Principals 36: 145-151. Jan. 1952.

10. Engle, T. L. High school psychology. Contemporary Psychologist 1: 140-143. 1956.

11. Engle, T. L. High school psychology course as related to university psychology courses. Bulletin of the National Association of Secondary School Principals 41: 38-42. Dec. 1957.

12. Engle, T. L. National survey of teachers of psychology in high schools. School Review 59: 467-471. 1951.

13. Engle, T. L. Objectives for and subject matter stressed in high school courses in psychology. American Psychologist 22: 162-166. 1967.

14. Engle, T. L. Objectives for and subject matter stressed in high school courses in psychology. Paper presented at a symposium for the high school psychology course, American Psychological Association Convention, 1965. Various paging. (Preprint)

15. Engle, T. L. Preparation for teaching psychology in high school. American Psychologist 15: 350-352. 1960.

16. Engle, T. L. Preparation for the teaching of psychology in high schools. Bulletin of the National Association of Secondary School Principals 44: 171-174. Feb. 1960.

17. Engle, T. L. Psychology: its principles and application. 4th ed. Yonkers, New York, World Book, 1964. 660 p.

18. Engle, T. L. Psychology: pupils in six high schools compare the value of the subject with that of six other fields. Clearing House 21: 469-473. 1947.

19. Engle, T. L. Some trends and problems presented by the teaching of psychology in high school. Psychological Reports 1: 303-306. 1955.

20. Engle, T. L. Teaching psychology at the secondary school level: past, present, and possible future. Paper presented at the Division 2, American Psychological Association Conference, New York, September 4, 1966. Various paging. (Preprint)

21. Engle, T. L. Teaching psychology in high school. Social Education 19: 346-348. 1955.

22. Engle, T. L. and M. E. Bunch. The teaching of psychology in high school. American Psychologist 11: 188-193. 1956.

23. Foster, Charles R. Psychology for life today. 2d ed. Chicago, American Technical Society, 1961. 430 p.

24. Frandsen, Arden N. Psychology in the high school curriculum. School Review 49: 515-526. 1941.

25. Geisel, John B. Personal problems. Boston, Houghton Mifflin, 1949. 435 p.

26. Goodlad, John I., Renata Von Stoephasius and M. Frances Klein. The changing school curriculum. New York, The Fund for the Advancement of Education, 1966. 122 p.

27. Helfant, Kenneth. Teaching of psychology in high schools: a review of the literature. School Review 60:467-473. 1952.

28. Jersild, Arthur T. and Kenneth Helfant. Education for self understanding: the role of psychology in the high school program. New York, Bureau of Publications, Teachers College, Columbia University, 1953. 122 p.

29. Landis, J. T. and Mary G. Landis. Personal adjustment, marriage, and family living. 3d ed. New York, Prentice Hall, 1958. 662 p.

30. Li, Jerome C. R. Statistical inference. Vol. I. Ann Arbor, Michigan, Edwards Brothers, 1964. 575 p.

31. Louttit, C. M. Psychology in nineteenth century high schools. American Psychologist 11:717. 1956.

32. Lucas, Ann F. A guide to upgrade high school psychology courses. Clearing House 37:523-528. 1963.

33. Lundgren, Henry Clay. Psychology of personal and social adjustment. 2d ed. New York, American Book Co., 1959. 534 p.

34. McNeely, Paul Ray. Materials, techniques, and methods in teaching psychology in Indiana secondary school. Doctoral dissertation. Fort Wayne, Indiana University, 1958. 217 numb. leaves (Abstracted in Dissertation Abstracts, no. 3216. 1959)

35. Noland, Robert L. A century of psychology in American secondary schools. Journal of Secondary Education 41:247-254. 1966.

36. Oregon. State Department of Education. Guide to secondary education in Oregon. Salem, 1966. 66 p.

37. Oregon. State Department of Education. Oregon rules for certification of public school teachers, educational specialists, and administrators. Salem, 1965. 53 p.

38. Roback, A. A. Psychology in American secondary schools in the '90's. American Psychologist 7: 44-45. 1952.

39. Ruch, F. L., Gordon N. Mackenzie and Margaret McClean. People are important. Chicago, Scott, Foresman, 1941. 283 p.

40. Rupe, F. L., Psychology for seniors. Bulletin of the National Association of Secondary School Principals 45: 105-108. Sept. 1961.

41. Sorenson, H. and Margerite Malm. Psychology for living. New York, McGraw-Hill, 1948. 637 p.

42. Stanley, Julian C. and Alan M. Abrams. Certification of psychology majors for the public schools. Psi Chi Newsletter, Spring, 1965, p. 11-12.

43. Stanley, Julian C. and Alan M. Abrams. Preparation of high-school psychology teachers by colleges. Madison, University of Wisconsin, Nov. 1, 1965. 5 p. (Unpublished mimeographed report of a study conducted for the American Psychological Association.)

44. Stone, Calvin P. and Goodwin B. Watson. A survey on teaching psychology in secondary schools. Psychological Bulletin 34: 660-674. 1937.

45. Woodworth, R. S. and Mary R. Sheehan. First course in psychology. New York, Holt, 1944. 445 p.

APPENDICES

APPENDIX A

1. Cover Letter
2. Oregon State Department of Education Introduction Letter
3. The Questionnaire
4. Cover Letter of Second Mailing

61 N. 35th Street
Corvallis, Oregon
March 20, 1967

A study is being conducted to determine the status of high school psychology in Oregon schools. The three areas to be examined are objectives, course content, and teacher background. Since you are listed as a teacher of high school psychology by the Oregon State Department of Education, I am inviting you to participate in this survey.

Although psychology has been in the curriculum of high schools in the United States since 1885, very few states have either teaching norms or course guides for psychology in high school. Just this year our state has published suggested course content for high school psychology courses. But I feel that we need more specific information than the new guide offers. To my knowledge, a survey like the one I am proposing was not done before the suggested course content was published. Further, I believe that all high school psychology teachers could benefit from knowing what other psychology teachers are doing.

Another possible use of the information obtained from this survey could be the development of a proposal for a National Defense Education Summer Institute for High School Psychology Teachers. Also, this material might be useful to our state institutions of higher education in developing specific courses for the training of high school psychology teachers. The State Department of Education could use this information to develop more specific objectives and course content guides for high school psychology.

I hope you will feel free to fill out this questionnaire with information that describes your particular approach to high school psychology. Although objectives and course content areas as found in a survey of the literature are listed, no one really knows what high school psychology <u>should</u> include. Your ideas as reflected in your course content and objectives are important to an understanding of high school psychology in Oregon. Neither schools nor teachers will be identified in the final study; only averages and ranges.

A copy of the results of this questionnaire will be furnished you if you list your name and mailing address on the enclosed postcard. If each teacher returns the questionnaire promptly, you should receive the results by the end of this school year.

I appreciate the time and effort you will spend on this questionnaire.

Sincerely yours,

Robert J. Kremer

RJK: sk
Enclosures

STATE OF OREGON
State Department of Education
PUBLIC SERVICE BUILDING
SALEM, OREGON 97310

March 15, 1967

Dear Psychology Teacher:

The Department of Education is pleased to endorse the study being undertaken by Mr. Robert J. Kremer of Oregon State University, which is designed to survey the status of high school psychology in Oregon. No other study has previously been made in Oregon and it comes at a very opportune time. This is the first year that a proposed psychology course outline has been included in the State Guide to Secondary School Education in Oregon. Mr. Kremer's study may be of great value in indicating areas to improve in high school psychology instruction.

Therefore, we are pleased to urge you to cooperate with Mr. Kremer in this endeavor, and we urge you to do your utmost to complete the research instrument in a thorough manner as your contribution to its success. The Department looks forward with anticipation to an analysis of the results of this study which may facilitate our efforts to improve psychology instruction in Oregon's schools.

Sincerely yours,

(Signed)
Max F. Harriger
Consultant on Social Studies

MFH: gn

HIGH SCHOOL PSYCHOLOGY QUESTIONNAIRE

SECTION I: GENERAL INFORMATION (Please place an X in the space before the classification which best described your particular school, psychology class, or personal background.)

1. The number of students in your high school is: 1.____under 300, 2.____300 to 1000, 3.____over 1000.

2. Please check all the grades that are taught in your high school. 1.____8th, 2.____9th, 3.____10th, 4.____11th, 5.____12th.

3. Is your psychology class: 1.____required for graduation? 2.____elective?

4. Is your psychology class limited to: (check more than one if appropriate) 1.____9th grade? 2.____10th grade? 3.____11th grade? 4.____12th grade? 5.____no limitation on grade level.

5. Is the length of your psychology class: 1.____one-semester? 2.____two-semesters?

6. Are the psychology classes in your school: 1.____part of the science curriculum? 2.____part of the social science curriculum? 3.____part of the counseling department? 4.____other (please specify) _____.

7. Are your psychology classes: 1.____primarily for students going to college? 2.____primarily for students not going to college? 3.____for students regardless of college plans?

8. What is the average size of the psychology classes you are presently teaching? 1.____20 to 25. 2.____26 to 30. 3.____31 to 35. 4.____36 to 40. 5.____41 to 45. 6.____other (please specify)_____

9. In your experience with high school psychology, do you find: 1.____more girls than boys take the course? 2.____more boys than girls take the course? 3.____about the same number of girls and boys take the course?

10. If you do not teach psychology full time, check the other courses you teach or other functions you perform for your school district.

1.____Modern Problems.	2.____U.S. History	3.____Western Civilization
4.____English	5.____Home Economics	6.____Counselor
7.____Vice-Principal	8.____Biology	9.____Chemistry
10.____Physics	11.____Business Education	12.____Mathematics

13.____Other (please specify)_____

(Please furnish the following information.)

11. How many psychology classes are you presently teaching? _____

12. Counting this year, how many years have you been teaching high school psychology?_____

13. Counting this year, how many years of teaching experience do you have?_____

14. What degrees do you hold? (If you hold a degree and have been doing graduate work, please indicate. i.e. B.A. degree plus 25 graduate hours)

_____

15. Name of the textbook(s) you use in class:
Title: _____Author_____Edition_____

If you know of any other school in which psychology is taught as a subject, would you please give me the name of the school and the name of the teacher?

_____

SECTION II: TEACHER PREPARATION

A survey of psychologists who are interested in high school psychology has suggested that the following courses could be considered as preparation for teaching high school psychology. Realizing that probably no high school teacher in the United States has taken all of these courses, please list the number of quarter hours you have in each area. Please write the number of hours in the appropriate column. (One semester hour equals one and one-half quarter hours.)

Lower Division Hours	Upper Division Hours	Graduate Hours (Taken after a BA or BS degree)	Approximate Year Taken	
_____	_____	_____	_____	General Psychology
_____	_____	_____	_____	Adolescent Psychology
_____	_____	_____	_____	Educational Psychology
_____	_____	_____	_____	Psychology of Learning
_____	_____	_____	_____	Social Psychology
_____	_____	_____	_____	Experimental Psychology
_____	_____	_____	_____	Personality
_____	_____	_____	_____	Mental Health
_____	_____	_____	_____	Statistics
_____	_____	_____	_____	Advanced General Psychology

(Please list any other psychology courses you have taken)

_____	_____	_____	_____	_____ (Name of Course)
_____	_____	_____	_____	_____ (Name of Course)
_____	_____	_____	_____	_____ (Name of Course)

SECTION III: AIMS AND OBJECTIVES

A preliminary survey of high school course outlines has suggested seven major objectives or aims for the course. Keeping in mind the objectives that you have for your course, please rank the following objectives from one (1) for the objective you feel is most important to seven (7) for the one you feel is least important.

OBJECTIVES	Rank
(a) To assist the student in deciding on a vocation objective and in preparing for his or her vocational life.	_____(a)
(b) To give the student a frame of reference for understanding social relationships, including the forces that tend to create social disorder and how psychological principles can be applied in dealing with such forces.	_____(b)
(c) To develop an understanding of learning processes and to increase study efficiency; to guide students into patterns of critical and creative thinking.	_____(c)
(d) To assist students in preparing for family living, including some understanding of the qualitative aspects of hetero-sexual relationships and of basic principles of child rearing.	_____(d)
(e) To assist students in developing a basic philosophy of life, such as needs, values, goals, and possible contribution to cultural advancement.	_____(e)
(f) To develop in the student an appreciation for psychology as a field of scientific knowledge, including a fundamental technical vocabulary and familiarity with basic research methods; to stimulate curiosity concerning problems of behavior.	_____(f)
(g) To develop in the student an understanding of an appreciation for the uniqueness of the individual and to apply psychological principles to the solution of his personal problems so that he may live harmoniously with others.	_____(g)

SECTION IV: COURSE CONTENT

A preliminary survey of high school psychology course outlines has suggested the following nine subject matter areas. Realizing that a course which would completely cover all of these nine areas would take much longer than one year, please list the approximate number of weeks you spend on each area. If you spend no time in a certain area, please put zero (0). Try to make the number of weeks spent total eighteen (18) if you teach a one-semester course or thirty-six (36) if you teach a full-year course.

SUBJECT MATTER AREA	Approximate Number of Weeks
(a) Biological background of behavior (such as mechanisms of heredity, the nervous system, glandular systems).	_____(a)
(b) Individuality (such as differences in intellectual ability, achievement, aptitudes, personality).	_____(b)
(c) Learning and thinking (such as classical conditioning, operant conditioning, remembering and forgetting, problem solving, creative thinking, efficiency of learning).	_____(c)
(d) Maturation and development (such as physical and behavioral development in infancy, babyhood, childhood, adolescence, adulthood, and old-age).	_____(d)
(e) Mental health (such as conflicts and frustrations, defense mechanisms, problems of personal adjustment, psychoneuroses, psychoses).	_____(e)
(f) Motivated and emotional behavior (such as drives, personal-social motives, emotional motivation, emotional states).	_____(f)
(g) Sensation and perception (such as the various senses, attending, perception of objects, perceptual constancy).	_____(g)
(h) Social behavior (such as attitudes, beliefs, propaganda, social groups, working with others).	_____(h)
(i) Statistical methods and measurement (such as measurement of central tendency and variability, scales, distributions of measurements, correlation).	_____(i)

Please put the questionnaire in the enclosed envelope and return.

61 N. 35th Street
Corvallis, Oregon
May 9, 1967

Toward the end of March, this year, you were sent a questionnaire concerning high school psychology. Perhaps this questionnaire was lost or misplaced. It probably arrived shortly after spring vacation, and being a high school teacher myself, I understand how busy you are at this time.

Enclosed is another questionnaire. I know that you are also very busy at this time of the school year but I would appreciate your taking time to fill it out. Hopefully, a report of the findings will be sent to you before the end of the school year.

Sincerely yours,

Robert J. Kremer

APPENDIX B

COMPARISON OF GROUPS OF OREGON TEACHERS

1. Comparison by size of school.
2. Comparison by length of course.
3. Comparison by Experience of Teachers.
4. Comparison by Academic Preparation of the Teachers.
5. High school psychology teachers who are also counselors compared with teachers who are not counselors.
6. Comparison by College Plans.

COMPARISON BY SIZE OF SCHOOL

OBJECTIVES

Objective	Schools 1000 and over Enrollment (n = 18)		Schools under 1000 Enrollment (n = 17)	
	Rank	Mean	Rank	Mean
Vocational	7	5.33	7	6.21
Social Relations	2	2.83	3	3.32
Learning	5	4.94	5	4.47
Family Living	4	4.06	6	5.53
Philosophy of Life	3	3.00	2	3.05
Scientific	6	5.67	4	4.42
Personal Problems	1	2.23	1	1.95

$r_s = .821$

COURSE CONTENT

Course Content Area	Schools 1000 and over Enrollment (n = 18)		Schools under 1000 Enrollment (n = 17)	
	Rank	Mean	Rank	Mean
Biological	7	3.22	8	2.82
Individuality	2	5.61	2	4.65
Learning and Thinking	4	3.89	3	4.59
Maturation and Development	5	3.61	4	4.35
Mental Health	1	7.89	1	5.71
Motivated and Emotional Behavior	6	3.39	6	3.88
Sensation and Perception	8	2.22	7	3.00
Social Behavior	3	4.61	5	4.29
Statistical Methods	9	1.56	9	2.35

$r_s = .933$

COMPARISON BY LENGTH OF COURSE

OBJECTIVES

Objective	One-Semester Course (n = 19)		Two-Semester Course (n = 18)	
	Rank	Mean	Rank	Mean
Vocational	7	5.53	7	6.06
Social Relations	3	3.37	2.5	2.78
Learning	5	4.53	6	4.89
Family Living	4	4.32	4	4.28
Philosophy of Life	2	3.26	2.5	2.78
Scientific	6	4.89	5	4.72
Personal Problems	1	2.11	1	2.06

$r_s = .955$

COURSE CONTENT

Course Content Area	One-Semester Course (n = 19)		Two-Semester Course (n = 18)	
	Rank	Mean	Rank	Mean
Biological	7	1.5	7	3.1
Individuality	3	2.3	1	6.7
Learning and Thinking	2	2.5	4	3.9
Maturation and Development	6	1.6	6	3.7
Mental Health	1	3.7	2	6.2
Motivated and Emotional Behavior	4	2.1	5	3.2
Sensation and Perception	8	1.4	8	2.8
Social Behavior	5	1.9	3	5.0
Statistical Methods	9	1.0	9	1.9

$r_s = .843$

COMPARISON OF EXPERIENCED AND INEXPERIENCED TEACHERS

OBJECTIVES

Objective	Experienced Teachers (n = 21)		Inexperienced Teachers (n = 16)	
	Rank	Mean	Rank	Mean
Vocational	7	6.19	7	5.57
Social Relations	2	3.19	3	3.00
Learning	5	4.75	5	4.76
Family Living	4	4.50	4	4.33
Philosophy of Life	3	3.38	2	2.76
Scientific	6	4.94	6	5.14
Personal Problems	1	1.50	1	2.53

$r_s = .965$

COURSE CONTENT

Course Content Area	Experienced Teachers (n = 21)		Inexperienced Teachers (n = 16)	
	Rank	Mean	Rank	Mean
Biological	7	3.20	7	2.90
Individuality	3	4.47	2	5.65
Learning and Thinking	2	5.27	6	3.65
Maturation and Development	4	4.33	4	4.00
Mental Health	1	6.20	5	3.70
Motivated and Emotional Behavior	6	3.53	5	3.70
Sensation and Perception	8	2.80	8	2.40
Social Behavior	5	4.00	3	4.80
Statistical Methods	9	2.20	9	1.75

$r_s = .607$

COMPARISON OF BETTER PREPARED WITH POORER PREPARED TEACHERS

OBJECTIVES

Objective	Better Prepared Teachers (n = 23)		Poorer Prepared Teachers (n = 14)	
	Rank	Mean	Rank	Mean
Vocational	7	5.91	7	5.57
Social Relations	2	2.96	3	3.29
Learning	6	5.17	4	3.93
Family Living	4	3.87	5	5.01
Philosophy of Life	3	3.04	2	3.00
Scientific	5	5.00	6	5.07
Personal Problems	1	2.04	1	2.14

$r_s = .857$

COURSE CONTENT

Course Content Area	Better Prepared Teachers (n = 23)		Poorer Prepared Teachers (n = 14)	
	Rank	Mean	Rank	Mean
Biological	7	2.96	6	3.17
Individuality	2	5.53	3	4.75
Learning and Thinking	5	3.87	2	5.42
Maturation and Development	3	4.65	8	2.67
Mental Health	1	6.91	1	6.67
Motivated and Emotional Behavior	6	3.43	5	4.00
Sensation and Perception	8	2.48	7	2.83
Social Behavior	4	4.52	4	4.33
Statistical Methods	9	1.83	9	2.17

$r_s = .683$

COMPARISON OF PSYCHOLOGY TEACHERS WHO ARE ALSO COUNSELORS WITH THOSE WHO ARE NOT COUNSELORS

OBJECTIVES

Objective	Non-counselors (n = 20)		Counselors (n = 17)	
	Rank	Mean	Rank	Mean
Vocational	7	5.90	7	5.65
Social Relations	2	3.05	3	3.12
Learning	5	4.55	5	4.88
Family Living	4	4.30	4	4.29
Philosophy of Life	3	3.60	2	2.35
Scientific	6	4.65	6	5.17
Personal Problems	1	1.90	1	2.29

$r_s = .964$

COURSE CONTENT

Course Content Area	Non-counselors (n = 20)		Counselors (n = 17)	
	Rank	Mean	Rank	Mean
Biological	7	3.15	7	2.87
Individuality	2	5.25	3	5.00
Learning and Thinking	3	5.05	6	3.53
Maturation and Development	4	3.70	4	4.33
Mental Health	1	6.85	1	6.80
Motivated and Emotional Behavior	6	3.60	5	3.67
Sensation and Perception	8	2.80	8	2.33
Social Behavior	5	3.65	2	5.53
Statistical Methods	9	1.95	9	1.93

$r_s = .667$

COMPARISON BY COLLEGE PLANS

OBJECTIVES

Objective	All Students (n = 28)		College Students (n = 6)		Non-College Students (n = 3)	
	Rank	Mean	Rank	Mean	Rank	Mean
Vocational	7	5.96	7	6.67	1	2.33
Social Relations	3	3.07	2	3.00	4	3.33
Learning	5	4.79	5	4.50	5	4.33
Family Living	4	4.21	5	4.17	6	5.33
Philosophy of Life	2	2.86	3	3.83	2.5	3.00
Scientific	6	5.07	4	4.00	7	6.67
Personal Problems	1	2.04	1	1.83	2.5	3.00

All Students - College, $r_s = .857$; All Students - Non-college, $r_s = .205$; College- Non-college, $r_s = .045$.

COURSE CONTENT

Course Content Area	All Students (n = 28)		College Students (n = 6)		Non-College Students (n = 3)	
	Rank	Mean	Rank	Mean	Rank	Mean
Biological	5	3.46	8	2.00	9	1.33
Individuality	2	5.15	4.5	4.00	2.5	6.00
Learning and Thinking	4	4.08	4.5	4.00	1	6.67
Maturation and Development	6	3.39	2	6.50	6	2.67
Mental Health	1	6.89	1	6.83	4.5	4.67
Motivated and Emotional Behavior	7	3.00	3	5.00	4.5	4.67
Sensation and Perception	8	2.50	7	2.83	7.5	2.00
Social Behavior	3	4.69	6	3.00	2.5	6.00
Statistical Methods	9	1.81	9	1.83	7.5	2.00

All Students - College, $r_s = .521$; All Students - Non-college, $r_s = .558$; College - Non-college, $r_s = .479$.

APPENDIX C

1. Letter to Oregon Teachers
2. Report to Oregon Teachers

61 N. 35th Street
Corvallis, Oregon
June 5, 1967

Dear Psychology Teacher:

I'd like to thank you for your participation in the study of high school psychology in Oregon. The response was very encouraging. Only two questionnaires were not completed; one teacher refused and the other has not yet returned the questionnaire.

Enclosed is the report on the data which I promised in my letter. No attempt is made to evaluate what should be taught in high school psychology. The purpose of the study is to find out what is being taught. I am including information on how 130 high school psychology teachers in the United States and 31 psychologists answered a similar questionnaire. You are invited to make your own comparisons.

It seems to me that there is at least one step left to be taken before we can evaluate high school psychology in Oregon. We should determine the needs of the students and whether or not they are being met by the course. I am hopeful that next year we can initiate such a study and I am confident, based on the response of the present study, of your cooperation. The American Psychological Association is beginning to be concerned about the up-grading of high school psychology and we in Oregon have a chance to play a leadership role.

I will be at the Lake Oswego High School next year teaching psychology and counseling. If you are ever in the area or if you have questions about the study, please contact me there.

Thank you again for your help.

Sincerely yours,

Robert J. Kremer

rjk/RJK

REPORT OF HIGH SCHOOL PSYCHOLOGY QUESTIONNAIRE

1. Size of schools reporting:
   Under 300 - 2
   300 to 1000 - 17
   over 1000 - 17

2. 13 schools are Senior High schools and 23 are four year high schools.

3. All psychology classes in Oregon are elective.

4. 20 classes are limited to 12th graders only, 13 to 11th and 12th graders, 1 is limited to 10th 11th, and 12th graders, 1 is limited to 10th and 12th graders, and one has no limit.

5. 19 classes are one semester in length and 17 are for a full year.

6. Only 1 psychology class is under the direction of the Science Department of the school, 21 are under the Social Science Department, and 12 are under the Counseling Department. One class is independent and another is under the Vocational Department.

7. Six classes are primarily for students going to college, 3 classes are primarily for students not going to college, and 27 classes are for students regardless of college plans.

8. The average class size is 26 to 30 students.

9. One teacher feels that more boys than girls take psychology, 13 teachers feel that more girls than boys take the class, and 22 teachers feel that it is about the same.

10. Other teaching areas:

Modern Problems	5	Counseling	15	Physical Education	1
U. S. History	2	Vice Principal	2	Mentally Retarded	1
Western Civilization	1	Business Ed.	1	Band, Music	1
English	1	Health	1	Potential Dropout Class	1

11. The average number of classes each teacher teaches is 2.14 with a range from 1 to 6.

12. The teachers in Oregon have been teaching psychology for an average of 2.31 years.

13. The Oregon teachers have been teaching for a total of 235 years which averages 6.53 years per teacher. The range: 1-18 years.

14. Degrees held:

B. A. Degree	1
B. A. + 15 hours	3
B. A. + 30 hours	9
M. A. Degree	11
M. A. Degree + 15 hours	6
M. A. Degree + 30 hours	2
More than an M. A. + 30 hours	4

AIMS AND OBJECTIVES Following is the list of aims and objectives you were asked to rank from 1 to 7.

A. To assist the student in deciding on a vocational objective and in preparing for his or her vocational life.
B. To give the student a frame of reference for understanding social relationships, including the forces that tend to create social disorder and how psychological principles can be applied in dealing with such forces.
C. To develop an understanding of learning processes and to increase study efficiency; to guide students into patterns of critical and creative thinking.
D. To assist students in preparing for family living, including some understanding of the qualitative aspects of heterosexual relationships and of basic principles of child rearing.
E. To assist students in developing a basic philosophy of life, such as needs, values, goals, and possible contribution to cultural advancement.
F. To develop in the student an appreciation for psychology as a field of scientific knowledge, including a fundamental technical vocabulary and familiarity with basic research methods; to stimulate curiosity concerning problems of behavior.
G. To develop in the student an understanding of an appreciation for the uniqueness of the individual and to apply psychological principles to the solution of his personal problems so that he may live harmoniously with others.

SUBJECT MATTER AREA Following is the list of subject matter areas which you were asked to indicate the approximate number of weeks spent.

A. Biological background of behavior (such as mechanisms of heredity, the nervous system, glandular systems).
B. Individuality (such as differences in intellectual ability, achievement, aptitudes, personality).
C. Learning and thinking (such as classical conditioning, operant conditioning, remembering and forgetting, problem solving, creative thinking, efficiency of learning.
D. Maturation and development (such as physical and behavioral development in infancy, babyhood, childhood, adolescence, adulthood, and old age).
E. Mental health (such as conflicts and frustrations, defense mechanisms, problems of personal adjustment, psycho-neuroses, psychoses).
F. Motivated and emotional behavior (such as drives, personal-social motives, emotional behavior, emotional motivation, emotional states).
G. Sensation and perception (such as the various senses, attending, perception of objects, perceptual constancy).
H. Social behavior (such as attitudes, beliefs, propaganda, social groups, working with others).
I. Statistical methods and measurement (such a measurement of central tendency and variability, scales, distributions of measurements, correlation).

TEACHER PREPARATION You were asked to indicate the number of hours of preparation you had in each of the following areas:

	Number of Teachers Who Had This Course N = 36
General Psychology	35
Adolescent Psychology	30
Educational Psychology	32
Psychology of Learning	18
Social Psychology	17
Experimental Psychology	11
Personality	15
Mental Health	14
Statistics	25
Advanced General Psychology	9

OBJECTIVES Following is the way the Oregon teachers ranked the objectives listed on the previous page compared with a national sample of psychology teachers (N = 130) and a sample of psychologists (N = 31). Mean rankings are used in all cases.

Objective	National Teacher Sample	Psychologists	Oregon Teachers: 1 Semester Course	Oregon Teachers: 2 Semester Course	Oregon Teachers: Total
A	6.2	5.8	5.1	6.1	5.6
B	3.5	2.5	3.4	2.5	3.0
C	4.1	3.7	4.5	4.9	4.7
D	4.7	5.0	4.3	4.3	4.3
E	3.6	4.4	3.1	2.8	3.0
F	3.4	2.3	4.9	5.1	5.0
G	2.4	4.2	2.1	2.2	2.1

COURSE CONTENT Following is a list of the number of weeks Oregon teachers spend on the course content areas listed on the previous page compared with the same two samples listed above. Mean number of weeks is used in all cases.

Content Area	National Teacher Sample	Psychologists	Oregon Teachers: 1 Semester Course*	Oregon Teachers: 2 Semester Course	Oregon Teachers: Total
A	3.4	3.4	1.5	3.1	3.0
B	5.6	5.2	2.3	6.7	5.5
C	5.4	7.5	2.5	3.9	4.5
D	4.2	5.4	1.6	3.7	3.5
E	5.8	2.0	3.7	6.2	6.8
F	5.6	5.7	2.1	3.2	3.7
G	2.0	2.0	1.4	2.8	2.8
H	3.2	3.6	1.9	5.0	4.4
I	1.0	1.0	1.0	1.9	2.0

*The numbers in this column should be doubled to compare them with the other columns.