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ABSTRACT

The space adequacy survey-college is a procedure by which a junior college administrator may determine how many and what kinds of teaching spaces are needed for a specific enrollment in a given educational program. Included in this report is a presentation of the major characteristics of the space adequacy survey-college and a description of the procedures used in applying it at seventeen California public junior colleges. Also included is a summary of the findings, and normative data derived from the application of the survey at each school, together with observable trends. (FS)

A PRELIMINARY REPORT ON THE APPLICATION OF THE SPACE ADEQUACY SURVEY-COLLEGE AT SEVENTEEN SELECTED CALIFORNIA JUNIOR COLLEGES

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California Junior College Association.

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FOREWORD

It is a truism that a profession advances in step with its development and perfection of devices and procedures to solve its difficult and recurring problems. One of the difficult and recurring problems in the field of school administration is the precise matching of teaching spaces to a given educational program and enrollment.

The Space Adequacy Survey approach to this problem was devised some years ago by Dr. Charles Bursch and Charles D. Gibson of the California State Department of Education, Bureau of School Planning staff, for use in translating junior and senior high school programs into school plant needs. Several years ago the secondary school approach was re-examined in the light of applying it to the collegiate level. Dr. Charles Bursch and Mr. John Branigan of the Bureau staff began preliminary work toward adapting the space adequacy process to the junior college specifically. During the past few years the collegiate instrument was refined considerably by Bureau of School Planning members; however, Gene Portugal undertook a complete study and, through cooperation with junior college districts and the Bureau of School Planning staff, further developed and refined it.

The Portugal study preliminarily reported here attacks the space adequacy problem at the collegiate level. The resulting refinement of the original procedures and data forms constitutes a substantial improvement in this instrument as a working tool for educational administrators. With the constructive use of these forms and procedures as refined by Mr. Portugal, an administrator can plan ahead with confidence to supply needed instructional spaces and can justify thoroughly the facilities provided. The summary sheets for each school and the normative data tables can serve as a "library of information" for anyone interested in junior college planning procedures.

Dr. Charles W. Bursch

Charles D. Gibson

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A report such as this is seldom the result of the efforts of any one person. It is the result of the contributions of many individuals and several organizations. The writer acknowledges with sincere appreciation the contributions of the following individuals:

Dr. Theodore Reller, Prof. of Education, University of California, Berkeley, for his counsel and guidance.

Dr. Charles Bursch, Chief, Bureau of School Planning, (Retired) Calif. State Department of Education, Sacramento, for the original development of the "Space Adequacy Survey-College".

Charles D. Gibson, Chief, Bureau of School Planning for his assistance and for making the resources of The Bureau of School Planning available for this study.

Mr. Clyde E. Goudie, AIA, donor of the grant which made this study possible.

Mr. Elwood Lehman, Field Representative, Bureau of School Planning who first suggested the study and helped guide its progress.

Mr. John Branigan and Mr. Aubrey Calvert, Field Supervisors who helped gather data for the project.

The Field Representatives of the Los Angeles and Sacramento offices of the Bureau of School Planning who aided in the collection of the massive amounts of data necessary for completion of the forms.

The Administrators of each of the junior colleges studied, who gave of their time and advice in preparation of these data.

And the following organizations:

The Bureau of Junior College Education, Calif. State Dept. of Education

The Bureau of School Planning, Calif. State Dept. of Education

The University of California, School of Education

The University of California, Field Service

The California-Junior College Association

The Building & Facilities Committee of the CJCA

INTRODUCTION

In the pages which follow these introductory remarks will be found: (1) The major characteristics of the "Space Adequacy Survey-College", (2) The procedures used in applying it at 17 California public Junior Colleges. (3) A summary of the findings and (4) Normative data derived from the application of the survey at each school, and observable trends.

The project was first suggested to the writer by Mr. Elwood Lehman, Field Representative for the Bureau of School Planning, California State Department of Education, Sacramento, California. Mr. Lehman indicated that Clyde E. Goudie, AIA, had given a modest grant to the University of California to finance a study of junior college building programs. Dr. Theodore Reller, Professor of Education at the University of California accepted the responsibility of guiding the writer in the conduct of the study. The Goudie grant was used to pay the expenses incurred in preparing this report.

The study, titled "Space Adequacy Determinations for Junior Colleges" is in the process of preparation as a doctoral dissertation at the University of California. It will cover a review of the literature, giving the formulae and procedures that have been used for determining how many rooms are needed to house a given educational program at the junior college level, a comparison of the results of these procedures with the results obtained by using the "Space Adequacy Survey-College", a detailed analysis of the instrument, a summary of opinions regarding the instrument, a review of the tests applied and recommendations for changes in the procedure, as well as

revised instructions for its use. It is expected that the study will be completed by 1962 and that abstracts will be abailable soon thereafter.

This report is but a small part of the entire study. Presented here are only the summaries of the results obtained from the application of the instrument and normative data which may be of interest to junior college administrators.

It is the sincere hope of the writer that the data herewith presented will be of some aid to those junior college districts planning to modify or expand existing facilities or to build a new plant.

CHAPTER I

SPACE ADEQUACY SURVEY-COLLEGE

A. What Is It?

Essentially the "Space Adequacy Survey-College" is a device or instrument by which a junior college administrator may determine how many teaching stations he will require for a specific enrollment for a given educational program. It was developed by the Bureau of School Planning of the California State Department of Education in 1958. Dr. Charles Bursch and Charles D. Gibson originally developed the instrument for high school use. The high school forms have been used successfully for the past ten years in the planning of secondary school buildings in California. The present form, adapted for use by junior colleges, is rather recent and until this study was begun, had been applied at only a few California junior colleges.

In response to the question, "What is the space adequacy survey-college?" Dr. Bursch replied, "It is a procedure for determining how many, and what kinds of teaching spaces are needed for an estimated number of students for a known educational program." In the introductory material which the Bureau of School Planning distributes with the forms for the Space Adequacy Survey-College, the following statements are made in regard to the Space Adequacy Survey.

Major Features

> In Junior Colleges there has long been need to construct a firm bridge from any given instructional program to appropriate and adequate teaching spaces to implement such a program for any specified number of enrollees.

Space Adequacy Survey for Junior Colleges undertakes to fill that need.

In cases where there is a stabilized enrollment pattern but a crowded building situation, precisely how many of what kind of teaching spaces are needed to make the plant adequate?

In cases where enrollments are increasing, what precisely will be the requirement when the enrollment reaches 1000? 1500? 2000? or 3000?

In newly formed Junior College Districts, after an educational program has been adopted, precisely how many of what kind of teaching spaces will be required for each of several stages of enrollment growth?

In order to supply answers to these and other related questions, it is necessary:

1. To determine courses to be offered.

2. To determine the relative emphasis desired among courses offered. (When the emphasis upon each course is expressed as a percentage of the total program, a good check is provided against departmental imbalance.)

3. To determine a manageable unit for computing program emphasis and teaching space need, it is proposed that such a unit is one enrollee in a class for one teaching period. (Student hour per week.)

4. To determine an average or ideal class size for each course to be offered.

5. To determine which courses are to be taught in general type classrooms and which require special rooms or laboratories.

6. To determine the percentage of full utilization of rooms that will be considered a practical workable maximum in terms of making good class scheduling reasonably possible. (Data presented here use 80% for general classrooms and 70% for special classrooms and laboratories as maximum practical utilization.)

7. To determine the number of class periods available for scheduling classes during a normal college day.

To move in an orderly and objective manner from these determinations to the desired goal, the number of each kind of teaching facility required for a given enrollment requires a well worked out and detailed procedure. Such a procedure is provided in the Space Adequacy Forms available from the Bureau of School Planning, California State Department of Education, Sacramento, California.

B. How is it Used?

No attempt will be made in this brief presentation to give the detailed instructions for the use of the instrument. These instructions will be supplied with the forms when they are distributed by the Bureau of School Planning, State Department of Education, Sacramento, California. Generally the procedure is as follows:

Upon the request of any Public California Junior College, a field representative of the Bureau will call at the college with the necessary forms for starting the survey. In order to complete Form A (as found in the appendix) it is necessary for the administration to select the most recent semester which is to be studied in detail, and to analyze the present curriculum emphasis, class size, and other material. In order to complete Form A, the administration should be able to furnish the name of each of the instructors on its staff, the classes he teaches, the hours he teaches these classes and the number of students in each of these classes. These data are then entered on Form A in the appropriate spaces and the totals and necessary mathematical computations are completed. Sample forms will be found in the appendix.

For Form B, it is necessary to have the grand total of student hours per week as determined from Column 7 of Form A. This will include the number of students enrolled, times the numbers of hours they attend in any one complete week. Eliminated from this figure is the number of student hours which are derived from attendance at classes in physical education or similar activities which do not require the use

of any regular classroom. For example, the physical education classes out on the field, on the tennis courts, in the swimming pools, in gymnasiums, or in specialized exercise rooms, tumbling rooms, etc., etc., would not be included in this total. The reason being that uniformity is seldom found in this field and when such special rooms are needed, they are usually built in response to a local request. When the total number of student hours per week for each subject has been derived, it is then divided by the grand total of student hours per week to arrive at the percentage of curriculum emphasis as indicated on Column 4 on Form B. This figure indicates the total number of student hours which are generated by this particular subject in regard to the total curriculum of the junior college in question.

At this point the field representative of the Bureau will meet for a conference with the department heads or division heads, the deans of instruction and such other administrators of the college as it might be deemed advisable to have present, to determine what shifts in curriculum emphasis may be expected or desired in the future. For instance, if currently the number of student hours per week generated by English is 12.7% of the total student hours per week, and the college is planning to increase the English requirement for graduation from the college from 3 units (as it may currently stand) to 6 units for future use, then a large increase in the number of student hours in English may be expected for the future. For this situation, it may be determined that this percentage may rise to 16 or 17 percent of the total number of student hours per week. To arrive at the computed

student hours per week for Column 6 it is simply necessary to multiply the grand total of "student hours per week" by the percentage emphasis for the future. The 4 or 5% increase in English requires an off-set of similar magnitude in other subjects so that the total does not exceed 100%. This will complete Form B.

Form C is a comparison of the present and future curriculum emphasis for several schools selected by the administration. It is used to make a comparison with other schools having similar curriculum emphasis and to find out whether or not the particular school being studied varies greatly from other schools of the same size located in similar type of community.

Form D of the study is completed by supplying the data required at the top which indicates the predicted enrollment, the present enrollment and the predicted increase. For the purposes of the study at hand, it was determined that the word "enrollment" should refer only to students carrying 12 or more units and that these would be considered as full-time students. This figure was derived from the October report presented to the State Department of Education in October of 1959. It is recognized that this eliminates the thousands of students who attend in the evening and many part-time students who attend in the day time, but who carry fewer than 12 units. However, it should be recognized that at the present time there is no standard way of computing "enrollment" for the junior colleges of California, other than this figure. Even the use of the Average Daily Attendance figure would be misleading since many junior colleges carry some of their

ADA in adult classes which do not meet on their own campus, and would therefore not be included in calculations for a particular site. Until such time as a "full time equivalent student" is acceptably defined for all the junior colleges of California, we have no standardized figure to use except that used in the October report.

Since these figures are used only to determine the anticipated growth of the institution, the fact that we arrive at a working growth factor does not jeopardize the accuracy of the computations. If the administration will recognize that the future enrollment should also be considered in terms of students carrying 12 or more units, no mathematical inaccuracies will occur in the use of this procedure.

Another conference with the administration of each college is necessary to determine average class size. This conference may be held immediately following the one regarding curriculum emphasis so that another visit need not be scheduled. In determining class size, we are considering enrollment in each of the classes as it would usually occur on approximately October 1st or the third week after classes have started and most, if not all, the 'adds' and 'drops' in each class have been completed. In many junior colleges, some of the classes have limited enrollment. in which case this figure should be chosen as the average class size for this subject. If there is a laboratory section which has student stations of a specific number, then this would determine the 'class size' for this purpose. Using these data, the number of class groups meeting per week at this institution can be determined.

This is not a utilization study, nor is any attempt made here to recommend what utilization is desirable or recommended. The report of the Master Plan Study has given recommended figures for the colleges of California. For the purposes of this study, it was determined that we would use the hours between 8 a.m. and 5 p.m. from Monday through Friday and exclude any classes occuring after 5 p.m. or on Saturdays. It is recognized that this may be a serious omission, and that perhaps in future studies there should be recognition of the utilization of the plant by evening classes. As has been noted frequently in the literature, most of the utilization studies made in the past have not included this material in the study. The reason given is that usually the administration will schedule evening classes in the existing structures built to house the day time program. Seldom if ever, are rooms or buildings constructed specifically to house an evening or adult program. It is hoped that future studies will recognize this omission and make provisions for it.

The committee guiding this study agreed that we would use 80% availability of the 35 hour week, or 28 hours for lecture, discussion, and similar classes and 70% of the 35 hour week, or $24\frac{1}{2}$ hours for laboratory-classroom availability. These figures are in excess of the recommendation of the Master Plan Survey team, but are not unattainable. At present there are several junior colleges which exceed this utilization and many which match it in many subject areas.

By a simple arithmetical process we arrive at the computed teaching space needs as indicated in Column 7 of Form D. At this point

another conference must be called with (usually) the Chief Administrator, the Dean of Instruction, the Business Manager, and other administrators responsible for the planning of classroom needs for the future. Since most of the teaching spaces computed will be in the nature of decimal figures, these must be rounded off to whole numbers. It would be illogical or impossible to build fractional rooms. Frequently several of the courses such as English, Mathematics and Foreign languages, may use rooms interchangeably, provided the classes do not vary too much in size. In which case, the total of the figures for these subjects in Column 7 can be combined to arrive at the teaching space needs as shown in Column 8.

If the college is planning a new campus, no further computations need be made. If however, it plans to add to its present campus, then we must know the number of adequate teaching spaces available. For the purpose of this study,unsafe buildings, temporary buildings, portable buildings, or "Army surplus" buildings, quonset huts, and buildings of a similar nature were not determined to be adequate. Subtracting the number of teaching spaces available presently, from the teaching space needs determined by conference, we arrive at the additional number of teaching spaces which it will be necessary to build in the future.

C. Some Precautions To Be Observed

For the public junior colleges of California, the task of preparing these forms is relatively simple, since they will have the help and guidance of the Field Representatives of the Bureau of School Planning. For administrators of other junior colleges, there are some precautions which should be observed in order to arrive at the correct figures on the final form. On Form A, where we enter the instructor's name, the classes he teaches and the number of students enrolled in each class, it is extremely important that each sheet contain not more than one of the subjects listed in Forms B and D. As we will be entering the total number of student hours for each subject on these latter forms it could become a rather difficult task to separate the courses later. For example, should Mr. Jones teach some courses in mathematics and a few in physics, the physics classes must be entered on the sheet labeled "physics", otherwise confusion will result later.

If the local junior college administrator is already familiar with the class size in each of the subjects being taught at his institution, and does not desire to make any comparative studies beyond what he already has on hand, then Columns 5 and 6 of Form A may be omitted, since these simply yield the total enrollment divided by the number of classes to determine the average class size in existance for this particular semester being studied. The completion of these columns is not required to determine the necessary data for the following forms.

In regard to Form B of the Space Adequacy Survey, another precaution to be observed is the substitution of the words "student hours per week"

for the word "enrollment" at the top of Column 2 of the old Form B. Some of the older forms use the word 'enrollment'. Should enrollment figures be used rather than student hours per week, then a second calculation would be necessary.

Perhaps the most important caution to be observed occurs in computing the curriculum emphasis for the future. One must understand that if the enrollment of a school is expected to double, and that therefore the number of students in any one particular subject would also be doubled, then the curriculum emphasis indicated by the percentage figure in this column will be identical to the original figure. It must be remembered that the curriculum emphasis for the future is based on the opinions of the department heads or division heads, the deans of instruction and the others at the institution who <u>should</u> be able to estimate, with some degree of accuracy, what the curriculum emphasis of the college will be in the future.

Perhaps it may be planned to add some new courses in areas which are not currently being taught. Perhaps some of the areas, in which enrollment has been constantly dropping, will continue to drop. Perhaps new industries moving into the area will require the college to add new courses to help train students for employment in this industry. Perhaps the requirements of the transfer institutions are expected to change and new courses will have to be added to meet these changes. Many factors are involved. We must recognize at this point that the instrument is a mathematical procedure, but that human judgment now becomes a factor in the answers received. This need not be a detriment or a weakness; it may in fact, be one of the strengths in

this instrument that a degree of flexibility to meet future needs becomes an inherent part of the instrument.

In making comparisons between schools, it is well to observe that schools which have a vocational orientation will necessarily show greater curriculum percentages in those fields, while those schools which are primarily transfer institutions, will show higher percentages in the academic fields.

The most significant figure in attempting to compare schools in regard to size or capacity is that called the "grand total of student hours per week." This is the number of students attending classes between the hours of 8 a.m. and 5 p.m. multiplied by the total number of hours they attend in any full week. This figure is, in the writer's opinion, a more significant figure than any other in attempting to compare the size of the institution with that of any other.

Another note of caution to be observed when looking at the figures for the number of rooms required to house a given program, is that in the final analysis, the number of rooms required, is what the administrators of these colleges feel is necessary. For instance, if we find that the numbers of rooms needed for certain subjects, as computed by the instrument, is determined as tenths or hundredths of single units, then these must be rounded off to whole numbers. Frequently (as had been indicated previously,) these can be combined into whole numbers. But occasionally a situation such as the following may occur, and in fact did occur. The number of Art Laboratories computed for one small college was .8 of one room. This particular college is in a community

which feels that the teaching of Art in its college is to be encouraged. It has a very strong Art department with two instructors. College authorities decided that they wanted one room for ceramics and sculpture, one room for pottery, mosaics and other crafts and one room for painting and drawing. The instrument therefore, will show a total of three art laboratories for this particular school, when actually the mathematical formula indicated that one room would house the whole program if we were to seek the utilization figures desired. Obviously, two of these three rooms will remain empty and unused for many hours during the week.

The other extreme of planning, that of building fewer rooms than the instrument indicated, occurred rarely. In the two situations where this did occur, the colleges were operating on very stringent budgets. The administration would attempt to schedule most rooms solidly from 8 until 5, (even including the noon hour). In some cases the normally 'open' periods on Tuesdays and Thursdays would be filled in by the use of hour and a half sessions on these two days to achieve the three hours per week necessary for three unit courses.

Many excellent and rather standardized procedures currently exist to help a junior college estimate its future full time enrollment. Surveys of the high schools in the area that normally 'feed' a particular junior college will reveal a percentage of the graduates that usually enroll at this college. Local administrators frequently will use data from the local department of health. Given the number of births each year they can calculate how many 18 year old persons may be expected to be available for enrollment in any given future year.

By taking the percentage of eighteen year olds that normally attend the school, a rough estimate may be made. Surveys of this nature and more extensive ones, including other factors, are frequently made for the junior colleges by the Superintendent of Schools Office for that particular county. An authoritative source for similar information is available from Dr. Carl Frisen, Demographer for the California State Department of Finance. Figures from the Chamber of Commerce, from public utilities and other sources will reflect the anticipated growth or decline of the area usually served by the junior college. There are many factors that influence the final estimate. The administrators usually have to consider whether or not the area is growing from immigration into the area, and whether or not industry is expanding. They must consider any plans for new and adjacent schools in the area, and the presence or absence of State Colleges, or branches of the University which may be built.

The figures shown here for the 1970 anticipated enrollment, are the enrollment figures as anticipated for the number of students carrying 12 or more units. Where these differ from the figures originally used, (which in some cases were ADA) they were adjusted to provide the same proportionate increase as other figures that may have been used, using the October 1959 enrollment report as the basis upon which to calculate the forecast enrollment for 1970. For a more complete understanding of the data presented in Chapter III of this paper, it would be well to look at the definition of terms in Section B-2 of Chapter II.

CHAPTER II

APPLICATION OF THE INSTRUMENT AT 17 SELECTED JUNIOR COLLEGES

A. Selection of the Colleges

The 17 schools selected for this study were chosen to represent examples of the urban, the rural, the academically oriented, the vocationally oriented, the large, the small, the old, the new; and as far as is possible, to attempt to achieve a representative sampling of the 63 public junior colleges in the State of California in 1959.

The committee which selected these schools was composed of Mr. Charles Gibson, Chief of the Bureau of School Planning, State Department of Education, the late Dr. Hugh Price, Chief of the Bureau of Junior College Education, State Department of Education, and the writer.

B. The Method of Application

1. Definition of Terms

ENROLLMENT: Total number of students carrying 12 or more units at each California junior college as reported to the State Department of Education on the "October (Statistical) report."

ADA: Average Daily Attendance. Legally defined in section 11451 California Educational Code 1959 edition. Generally computed for junior colleges by multiplying total number of students by total number of hours attended per year and dividing by 525.

STUDENT/HOURS/WEEK: Student hours per week. Calculated by multiplying the total number of students in each class by the number of hours each class meets in any full week.

GRAND TOTAL-STUDENT/HOURS/WEEK: The total of all student/hours/week. For the purpose of this study only those classes using classrooms are included. P.E. classes using gymnasiums, playing field, exercise rooms, special equipment rooms are excluded.

SHOP: A Specialized classroom with considerable machinery, tools, test equipment, etc. for use by vocational or trade and industrial classes.

CLASS: An academic unit of one or more students formally organized for instruction in a specific course under the supervision of an instructor.

CLASS MEETING: A regularly scheduled meeting of one or more students assembled for instruction.

CLASS SIZE OR SIZE OF CLASS: The number of students enrolled in a class. Normally the number appearing on the instructor's official class list as of the standard census date is considered the "size of the class." For this study, the enrollment as of the first week of October 1959 was used. Where the class had limited enrollment, or where a laboratory section was limited by the number of student stations available, this was the figure used for class size.

PERIOD: As used in space utilization studies, a period is a unit of time approximating one hour. Generally in institutions of higher education a class period consists of 50 minutes of instruction, with an allowance of 10 minutes for changing classes. A class meeting scheduled for two consecutive hours, possibly a total of 110 minutes, should be considered as two class periods in a space utilization study. A class meeting scheduled for an hour and a half, which in most colleges would amount to 75 or 80 minutes of actual instruction, should be processed as 1.5 class periods.

STATION: The total facilities necessary to accommodate one person at a given time. A student station is a chair, or a seat, or a laboratory desk, or some other facility necessary to accommodate one student during an instructional period.

TEACHING STATION: One room, (lecture, discussion, activity or laboratory) having one teacher conducting one class.

INSTRUCTIONAL SPACE: Any room scheduled for class meetings.

A room regularly used for or available for class meetings should be classified as "instructional space" regardless of the designation of the building in which it is located. On many campuses, instructional rooms are found in the "administration building", or the "library building," or the "field house," or the "student union building."

Following are descriptions of the major kinds of instructional space found in institutions of higher education:

(a) A GENERAL CLASSROOM is an instructional room used chiefly for lectures, recitation, and seminar type of class meetings. Other common terms for this are "non-specialized instructional space" and "lecture room."

(b) LABORATORY is an instructional room equipped for a special purpose such as chemistry experiments, food preparation and service in home economics.

(c) A SHOP is an instructional room fitted out with specialized machines, tools, and technically equipped usually used in vocational, trade and industrial or technical instruction.*

2. Standards Used in the Study

The standards agreed upon for this study were determined by several committee meetings. The committees involved were the Junior College Building and Facilities Committee of the California Junior College Association, Junior College Building Advisory Committee assembled at the University of California and the Committee composed of members of the Bureau of School Planning of the State Department of Education at Sacramento, California.

a. Schools Selected

Only those California Junior Colleges which were public, tax supported institutions were used in the study. Included were independent districts, junior colleges that were part of secondary districts and junior colleges which were part of unified districts. No schools which share their facilities with a high school program were included for the obvious reason that it would be difficult to

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* The definition for "class size," "period," "station" and "instructional space" are condensed and freely adapted from Russell & Doi Manual for Studies of Space Utilization in Colleges and Universities, American Association of College Registrars and Admission Offices, Ohio U. Athens, Ohio, 1957.

make any statistically accurate survey of a plant which was shared by another institution.

b. Enrollment

For enrollment figures we used the figures given for the number of students carrying 12 or more units in the fall semester of 1959 as recorded by the institution on its 'October report' of 1959. ADA, the average daily attendance for each institution, was derived from the official publication of the State Department of Education distributed in 1960.

c. Student Hours Per Week

The "grand total student hours per week" was the sum of all the hours produced in any one full week between the hours of 8 a.m. and 5 p.m. for each institution, derived by multiplying the number of students in attendance by the number of hours attended during the hours indicated. Eliminated from this grand total are student hours generated in physical education classes which meet on playing fields and gymnasiums, or in special exercise rooms set aside for special purposes such as judo, trampoline, etc. Physical education classes in Coaching or in Theory of individual sports were included.

d. Utilization

It was determined by conference that we would use 80% of a 35 hour week as saturated utilization for all lecture, discussion, seminar and similar type classes. This would yield a figure of 28 hours of availability for these classes and to use 70% of a 35 hour week for laboratory and shop classes yielding an availability of $24\frac{1}{2}$

hours for these latter classes.

e. Class Size

Class size was determined by using the enrollments which occur on or about the third week of the fall semester of 1959. If the college had a policy of limited enrollment in certain classes, this was selected as the class size. Whenever the college determined that they would prefer to change to the larger type lecture situation in certain classes, the larger figure was used in computing the room needs for the future.

f. Forms Used

The standard forms developed in 1958 by the Bureau of School Planning for the "Space Adequacy Survey-College" were used on the first three schools studied. A minor change was made in Forms B and D in order to include the greater variety of classes being offered at the larger junior colleges. This made for a more accurate presentation of the curriculum emphasis and room needs for these institutions. It did not affect the results in any way. No major changes were made in the forms during the application of the instrument of the 17 schools studied.

g. Future Curriculum Emphasis and Room Needs

It was determined that we would use the year 1970 in considering future curriculum emphasis and future room needs based on the institutions own determination of what its "enrollment" might be in the year 1970.

h. Classes and Hours Omitted

Any hours for any class which were DHR (or hours by arrangement) in which the students attended on their own time, and without an instructor in charge, were not included in the study. An example of this might be the extra hours put in by mechanical drawing students. Also, excluded were such hours as might be put in as 'work experience' classes in down town stores, or nursing classes conducted at the hospitals and aviation flight time at the airport. Only those classes which met on campus, under the supervision of an instructor, in courses related to fields as indicated in the previous sentence were included.

3. Data Collection

Because of the large number of people involved in the collection of the data for the study, there were several minor variations in the procedure. This however, has no serious effect on the validity of the statistics collected. Although the procedures may have differed in the original application, the data were rearranged to fit the standard procedure and no changes in totals or results occurred.

On occasion it was found that the classification of certain courses by the various people involved differed from the classification of the same course at another institution. For this reason, conferences with the Field Representatives were held periodically to standardize the classification of courses which might have no traditional classification. An example of this would be a course such as Law Enforcement. One field representative classified this class as a political science. It was determined that it should appear

with the vocational, T and I classes.

After the masses of data for each institution were collected and assembled, conferences were held to determine if there were to be any shifts in curriculum emphasis and what the college felt was desirable as optimum class size.

At all of these conferences, the writer was directly involved and met with the members of the administrative staffs of the colleges and with the field representatives of the Bureau of School Planning who were present.

The staff of the Bureau of School Planning, assisted in most cases by the writer, then computed the mathematical figures for the student hours per week in each subjedt as required for the completion of Form D. After the number of rooms required for each course had been determined, another conference was held with the Administrative Staffs of each of the colleges at which time the writer and the members of the Bureau of School Planning determined by conference what adjustments should be made in these figures.

Radically condensed summaries of the findings at each institution will be found in Chapter III.

After the data collection had been accomplished, all mathematical computations completed, and all conferences held, the writer then held interviews with the administrative staff personnel who were directly involved in the completion of the study at each institution. The results of these interviews will be published in the dissertation currently being prepared at the University of California at Berkeley.

CHAPTER III

INTRODUCTION

On the following pages will be found the summary sheet for each of the seventeen schools studied. It should be recognized that these summary sheets contain only those data regarded as absolutely essential for determining the current and future curriculum emphasis and the number of rooms needed to house a given educational program in 1970. At the average junior college with a day time enrollment of 1500-2000 it will take sixty or seventy pages of data to complete Form A yielding the current curricular percentage emphasis, and six pages each for Forms B and D to arrive at future curricular emphasis, class size and the number of rooms needed. On the summary sheets which follow are found only those data which are considered essential for making comparisons between schools and to aid in the planning needs for future schools.

Where no figures or no changes appear in the column headed "Future," it was the decision of the local junior college authorities that no significant changes in curriculum emphasis were anticipated or that they did not desire to attempt to estimate the extent of such changes.

Note: The data for the future for the College of San Mateo is for 1961, not for 1970.

NAME OF SCHOOL: AMERICAN RIVER — LOCATION: (SACRAMENTO)

Student Hours per Week 26,381 (Exclude P.E. not in classroom)

Enrollment: October 1959 OCTOBER 1959 1,062 (4500 IN 1970) (Students carrying 12 or more units from Cat. report)

1959 ADA Total: 1,770 Adult: 445

	Department Courses	% Curriculum Emphasis 1959	% Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	12.11	12.11	35	15
	Drama-Speech	2.25	2.25	25	4
	Foreign Language	2.48	2.48	25	5
	Mathematics	9.43	9.43	35	11
	Social Science				
	Anthropology	.80	.80		
	Economics	.94	.94		
	Geography	.76	.76	40	
	History	5.85	5.85	40/150	1 LL
	Humanities				
	Orientation				
	Philosophy	1.10	1.10	25	
	Political Sci.	1.85	1.85		
	Psychology	8.59	8.59		
	Sociology	1.36	1.36		
	Other				
	ALL Total: Soc.Sci.	21.25	21.25		15
	Total: "Academic"	47.52	47.52		51
ART	Apprec., Hist., Theory	.82	.82	100	1 LL
	Drawing-Paint.				
	Crafts	2.98	2.98	25	6
	Photography				
	Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	.94	.94	16 100	1 1 LL
	Choral	.69	.69		1
	Instrumental Practice Grps.	.98	.98		1
PHYSICAL EDUCATION	Health Education	.20	.20		1
	Hygiene	2.25	2.25	150	1 LL
	First Aid	.19	.19		1
	Coaching				
	READING LAB	1.5	1.5	25	3
	JOURNALISM	.34	.34	20	1

	Department Courses	% Curriculum Emphasis 1959	% Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	2.27	2.27	35	3
	Typing, Shorthnd.	4.63	4.63	35	6
	Off. Trng. (Mach.)	.87	.87	30	2
	Business Eng.				
	Law, Math., Etc.	1.36	1.36	35	2
	Distrib. Educ.				
	~~Bact. Process~~ ADV	.32			
	Human Relations				
	Marketing			25	1
	Sales	.16	.16		
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact. Lecture	1.57	1.57	60	3
	Lab.	2.12	2.12	30	5
	Anatomy, Physiol. Lecture				
	Lab.	2.41	2.41		
	Botany, Natr. Stdy. Lecture				
	Lab.				
PHYSICAL SCIENCE	Physical Science Lecture	1.03	1.03		
	Lab.				
	Geology Lecture	.33	.33		
	Lab.				
	Astronomy			30	2
	Meteorology				
	Chemistry Lecture	2.47	2.47	150	1 LL
	Lab.	4.27	4.27	25	8
	Physics Lecture	1.54	1.54	48	1
	Lab.	.77	.77	16	2
ENG.	Strength of Mat. Stat.				
	Engineering Drw.	4.60	4.60	20	9
	Surveying	.59	.59	16	1

	Department Courses	% Curriculum Emphasis 1959	% Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd. School				
	Aero Flt. Prog.				
	Architectural Drafting				2
	Aviation Mechan.				
	Agriculture Lecture				
	Lab.				
	Building Trades				
	Electronics Lecture	.63	.63	50	2
	Lab.	4.93	4.93	25	10
	Law Enforcement				
	Technical Draft.				
	Shops Automotive	4.49	4.49	24	1
	Machine				
	Metals				
	Welding			24	1
	Refrig.				
	Other ROCKETRY TECH.				1
HOME EC. & NURSING	Home Econ.				
	Lecture	1.21	1.21	30	1
	Lab.			30	1
	Nursing				
	R.N. Program				
	L.V.N. Program				
	Dental Asst.				
	Med. Asst.				
	SEWING LAB			30	1
	Total Rooms Needed				136
	Large Lecture (Little Theatre)				5
	Standard Classrooms				63
	Special Classrooms & Shops				38
	Labratories				30

* $\frac{1531}{6500} = \frac{1062}{4500}$

NAME OF SCHOOL: ANTELOPE VALLEY COLLEGE — LOCATION: LANCASTER

Student Hours per Week 7164 (Exclude P.E. not in classroom)

Enrollment: October 1959 436 (1052 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 1,026 Adult: 464

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	13.2	12.0	30	6
	Drama-Speech	2.9	3.0	30	3
	Foreign Language	2.1	4.0	30	2
	Mathematics	13.3	11.0	40	5
	Social Science Anthropology				
	Economics	1.3	1.2	40	1
	Geography		1.2	30	-
	History	5.2	5.0	45	2
	Humanities				
	Orientation	2.7	2.7	30	2
	Philosophy	.6	.6	30	-
	Political Sci.	1.7	1.7	45	1
	Psychology	3.1	3.1	45	1
	Sociology	1.1	1.1	45	1
	Other S.S.				1
	JOURNALISM				2
	Total: Soc.Sci.	15.7	16.6		11
	Total: "Academic"	47.2	40.6		27
ART	Apprec., Hist., Theory	.8	1.0	30	1
	Drawing-Paint.	.6	1.0	24	1
	Crafts				
	Photography Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	1.0	1.0	30	1
	Choral	1.0	1.0	50	1
	Instrumental Practice Grps.	.7	1.0	50	1
PHYSICAL EDUCATION	Health Education	2.8	2.5	30	2
	FIRST AID	.9	.5	30	-
	Coaching				
	READING LAB			30	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	2.3	2.5	24	1
	Typing, Shorthnd.	3.3	4.0	60	2
	Off. Trng. (Mach.)	1.1	1.1	30	1
	Business Eng.				
	Law, Math., Etc.	1.6	1.6	30	1
	Distrib. Educ. Data Process.	.8	.8		1
	Human Relations				
	Marketing				
	Sales				
	Work Experience	.4	.4		-
LIFE SCIENCE	Biol., Zool., Bact. Lecture	1.5	1.5	72	1 LL
	Lab.	2.2	2.2	24	1
	Anatomy, Physiol. Lecture		.2	72	
	Lab.		.4	24	1
	Botany, Natr. Stdy. Lecture		.2	72	
	Lab.		.4	24	1
PHYSICAL SCIENCE	Physical Science Lecture	1.0	1.0	72	
	Lab.				
	Geology Lecture	1.3	1.3	48	
	Lab.		.3	24	1
	Astronomy				
	Meteorology				
	Chemistry Lecture	2.5	2.2	72	1 LL
	Lab.	4.4	4.0	24	3
	Physics Lecture	2.6	2.2	72	1 LL
	Lab.	3.5	3.0	24	3
ENG.	Strength of Mat. Stat.		.5	24	1
	Engineering Drw.	1.6	1.5	30	1
	Surveying	1.5	1.5	24	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd. School				
	Aero Flt. Prog.				
	Architectural Drafting				
	Aviation Mechan.				
	Agriculture Lecture				
	Lab.				
	Building Trades				
	Electronics Lecture	4.0	3.0	48	1
	Lab.		1.5	24	2
	Law Enforcement		.8	30	
	Technical Draft.	1.0	1.0	30	1
	Shops Automotive		1.0	24	1
	Machine				
	Metals	1.1	1.0	24	1
	Welding	.5	.5	24	1
	Refrig.				
	Other WOOD	1.1	1.0	24	1
HOME EC. & NURSING	Home Econ. Lecture				
	Lab.		1.2	30	2
	Nursing R.N. Program				
	L.V.N. Program	6.1	3.0	24	2
	Dental Asst.				
	Med. Asst.				

Total Rooms Needed	67
Large Lecture (Little Theatre)	3
Standard Classrooms	34
Special Classrooms & Shops	13
Labratories	12

NAME OF SCHOOL: BAKERSFIELD COLLEGE — LOCATION: BAKERSFIELD, CALIFORNIA

Student Hours per Week 39,874 (Exclude P.E. not in classroom)

Enrollment: October 1959 2,078 (3,117 IN 1970) (Students carrying 12 or more units from Cnt. report)

1959 ADA Total: 3,184 Adult: 594

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	12.7	12.7	30	9
	Drama-Speech	2.1	2.1	25	2
	Foreign Language	3.8	4.0	30	3
	Mathematics	7.4	7.4	30	6
	Social Science				
	Anthropology				
	Economics	.7	.5		
	Geography	.8	.8		
	History	9.7	9.7		
	Humanities	.6	1.0		
	Orientation	3.1	3.1	40	2
	Philosophy	.6	.6		
	Political Sci.	.4	.4		
	Psychology	4.3	4.3	40	2
	Sociology	1.3	1.3		
	Other				
	Total: Soc.Sci.	21.5	21.3	40	8
	Total: "Academic"	47.5	47.5		32
ART	Apprec., Hist., Theory	2.4	2.2	35	2
	Drawing-Paint.			24	1
	Crafts				
	Photography				
	Lecture	.06	.06		
	Lab.	.04	.04		
MUSIC	Lecture Hist., Theory, Appreciation	1.4	1.2	60	1
	Choral	.4	.4	60	1
	Instrumental Practice Grps.	.6	.6	60	1
PHYSICAL EDUCATION	Health Education	3.1	3.0	40	1
	Hygiene				
	First Aid			30	1
	Coaching				
	READING LAB	1.3	1.3	20	2
	JOURNALISM	.6	1.0	10	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	INTRO TO BUSINESS	1.5	1.5		
	Acct., Bkkpg.	1.4	1.4	35	1
	Typing, Shorthnd.	2.7	2.7	42	2
	Off. Trng. (Mach.)	1.1	1.1	24	2
	Business Eng.	.9	.8		
	Law, Math., Etc.	1.4	1.4	40	1
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	.2	.2		
	Sales				
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	.7	.7	72	1
	Lab.	1.6	1.6	24	3
	Anatomy, Physiol.				
	Lecture	1.2	1.2		
	Lab.	1.4	1.4		
	Botany, Natr. Stdy.				
	Lecture	.4	.4	72	1
	Lab.	.8	.8	24	3
PHYSICAL SCIENCE	Physical Science				
	Lecture	.5	.5		
	Lab.	.5	.5		
	Geology				
	Lecture	1.2	1.2	50	
	Lab.	.1	.1	18	1
	Astronomy				
	Meteorology				
	Chemistry				
	Lecture	2.4	2.4	72	1
	Lab.	4.4	4.4	24	5
	Physics				
	Lecture	1.6	1.6	80	1
	Lab.	1.1	1.1	20	2
ENG.	Strength of Mat. Stat.	.3	.3	40	
	Engineering Drw.	1.7	1.7	20	2
	Surveying			20	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms
VOCATIONAL, TECHNICAL AND INDUSTRIAL	INDUST. SCI.				
	[illegible] etc	1.2	1.2		1
	[illegible] AS	.1	.1		
	Architectural Drafting	.7	.5	24	1
	Aviation Mechan.				
	Agriculture				
	Lecture	1.1	1.0	40	1
	Lab.	.8	.8	20	1
	Building Trades				
	Electronics	.8	1.0	60	1
	Lecture TV RADIO	.4	.4	60	1
	Lab.	1.0	1.2	20	2
	Law Enforcement	.7	1.0	30	1
	Technical Draft.				
	Shops				
	Automotive	1.5	1.0	20	1
	Machine	.13	.13	1	1
	Metals	.24	.24		
	Welding	.49	.49	20	1
	[illegible] WOOD	.35	.35	18	1
	Other TECH MATH	.9	.9	(SEE MATH)	
	IND. MATH	.5	.5		
HOME EC. & NURSING	Home Econ.				
	Lecture	.4	.4	30	1
	Lab.	1.3	1.3	20	2
	Nursing				
	R.N. Program	.3	1.0	25	1
	L.V.N. Program	.3	1.0	25	1
	Dental Asst.				
	Med. Asst.				

Total Rooms Needed	87
Large Lecture (Little Theatre)	4
Standard Classrooms	37
Special Classrooms & Shops	24
Labratories	22

NAME OF SCHOOL: COMPTON JUNIOR COLLEGE — LOCATION: COMPTON, CALIFORNIA

Student Hours per Week 25,217 — (Exclude P.E. not in classroom)

Enrollment: October 1959 1,433 (2,400 IN 1970) — (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 2,993 — Adult: 460

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES NOT REQUIRING NON-SPECIALIZED CLASSROOMS	English	11.1	11.0	35	5
	Drama-Speech	1.9	2.1	30	1
	Foreign Language	3.2	3.2	25	2
	Mathematics	8.2	8.2	25	5
	Social Science		DRAMA		1 L
	Anthropology				
	Economics				
	Geography				
	History				
	Humanities				
	Orientation				
	Philosophy				
	Political Sci.				
	Psychology				
	Sociology				
	Other				
	Total: Soc.Sci.	18.4	18.1	35	6
	Total: "Academic"	42.8	42.6		
ART	Apprec., Hist., Theory	.7	.7	45	1
	Drawing-Paint.	.3	.3		
	Crafts	1.5	1.8	20	3
	Photography Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	.9	.9	20 45	1
	Choral	.4	.4	75	1
	Instrumental Practice Grps.	1.2	1.2		1
PHYSICAL EDUCATION	Health Education				
	Hygiene				
	First Aid	2.3	2.3	40	1
	Coaching				

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	3.2	3.2	35	1
	Typing, Shorthnd.	4.2	4.2	45	2
	Off. Trng. (Mach.)	2.2	2.2	25	2
	Business Eng.				
	Law, Math., Etc.	2.7	2.7	35	2
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	.2	.2	35	
	Sales				
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact. Lecture	2.5	2.5	75	1
	Lab.	3.6	3.6	25	
	Anatomy, Physiol. Lecture	.2	.2	75	1
	Lab.	.3	.3	25	
	Botany, Natr. Stdy. Lecture				
	Lab.			25	3
PHYSICAL SCIENCE	Physical Science Lecture				
	Lab.				
	Geology Lecture			32	1
	Lab.				
	Astronomy				
	Meteorology				
	Chemistry Lecture	4.4	4.4	75	1
	Lab.	3.6	3.6	25	3
	Physics Lecture	1.9	1.9	45	1
	Lab.	1.6	1.6	20	2
ENG.	Strength of Mat. Stat.	1.1	1.1	24	1
	Engineering Drw.	5.6	5.6	24	4
	Surveying				

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd. School				
	Aero Flt. Prog.				
	Architectural Drafting				
	Aviation Mechan.				
	Agriculture Lecture				
	Lab.				
	Building Trades				
	Electronics Lecture				
	Lab.				
	Law Enforcement				
	Technical Draft.				
	Shops Automotive	5.7	5.7		1
	Machine				
	Metals				1
	Welding				1
	~~Building~~ WOOD			24	
	Other GRAPHICS				1
HOME EC. & NURSING	Home Econ. Lecture	1.1	1.1	20	2
	Lab.				
	Nursing R.N. Program				
	L.V.N. Program	4.9	4.9	25	3
	~~Practical~~ Lab	.6	.6		1
	Med. Asst.				

Total Rooms Needed	63
Large Lecture (Little Theatre)	4
Standard Classrooms	32
Special Classrooms & Shops	13
Labratories	14

NAME OF SCHOOL: EL CAMINO COLLEGE

LOCATION: EL CAMINO (SOUTH LOS ANGELES AREA)

Student Hours per Week 65,830 (Exclude P.E. not in classroom)

Enrollment: October 1959 *3,049 = (4,110 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 3,757 Adult: 1,325

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	12.36	12.36	35	14
	Drama-Speech	2.07	2.07	33	2
	Foreign Language	4.84	4.9	35	5
	Mathematics	9.18	9.1	35	8
	Social Science				
	Anthropology				
	Economics	1.15	1.15		
	Geography	.57	.57		
	History	8.99	8.99		
	Humanities				
	Orientation				
	Philosophy	5.68	5.88		
	Political Sci.	1.17	1.17		
	Psychology	2.11	2.11		
	Sociology	1.62	1.62		
	Other				
	Total: Soc.Sci.	21.49	21.49	35	18
	Total: "Academic"	50.9	50.9		47
ART	Apprec., Hist., Theory	.40 .86	.40 .86	40	2
	Drawing-Paint.	3.21	3.21	25	6
	Crafts				
	Photography				
	Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	1.71	1.71	40	2
	Choral	.45	.45	22	6
	Instrumental Practice Grps.	.51	.51		
PHYSICAL EDUCATION	Health Education				
	Hygiene	1.50	1.50	35	2
	First Aid				
	Coaching				
	READING LAB	.56	.56	35	1
	JOURNALISM	.40	.40	25	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	2.34	2.34	36	3
	Typing, Shorthnd.	3.48	3.48	36	4
	Off. Trng. (Mach.)	.71	.71	36	3
	Business Eng.	.31	.31		
	Law, Math., Etc.	1.01	1.01	35	2
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	.21	.21	40	1
	Sales	.52			
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	1.85	1.85	36	2
	Lab.	2.62	2.62	36	4
	Anatomy, Physiol.				
	Lecture	.12			
	Lab.	.36			
	Botany, Natr. Stdy.				
	Lecture	.10	.10		
	Lab.	.31	.31	36	
PHYSICAL SCIENCE	Physical Science				
	Lecture	.71	.71	35	1
	Lab.				
	Geology				
	Lecture	1.53	1.53	36	2
	Lab.				
	Astronomy				
	Meteorology				
	Chemistry				
	Lecture	3.36	3.34	28	6
	Lab.	3.99	3.97	28	6
	Physics				
	Lecture	2.27	2.24	30	2
	Lab.	2.11	2.09	30	4
ENG.	Strength of Mat. Stat.	.38	.36	35	1
	Engineering Drw.	2.42	2.42	32	3
	Surveying	.30	.30	32	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd. School				
	Aero Flt. Prog.				
	Architectural Drafting	.52	.52	35	1
	Aviation Mechan.				
	Agriculture				
	Lecture				
	Lab.				
	Building Trades				
	Electronics				
	Lecture	1.11	1.11	28	2
	Lab.	2.01	2.01	28	7
	Law Enforcement	.86	.86	35	2
	Technical Draft.	2.26	2.26	35	2
	Shops WOOD			24	1
	Automotive	.90	.90	24	2
	Machine				
	WELDING	.46	.46	24	1
	LECT.			24	2
	Refrig. LAB			24	1
	Other CARPENTRY	1.42	1.42		
HOME EC. & NURSING	COSMETOLOGY				3
	Home Econ.				
	Lecture	.21	.21	35	1
	Lab.	.58	.58	24	3
	Nursing				
	R.N. Program				
	L.V.N. Program				
	Dental Asst.				
	Med. Asst.				
	RELATED TECH.			35	1

Total Rooms Needed	141
Large Lecture (Little Theatre)	
Standard Classrooms	84
Special Classrooms & Shops	33
Labratories	23

*12 OR MORE UNITS 1959-OCT. REPORT
(9,962 ENROLLMENT - 12,000 IN 1970)

NAME OF SCHOOL: ALLEN HANCOCK — LOCATION: SANTA MARIA

Student Hours per Week 5,491 (Exclude F.E. not in classroom)

Enrollment: October 1959 267 (750 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: Adult: 207

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	10.3	10.5	25	1
	Drama-Speech		(100	20	1 LT
	Foreign Language	1.3	2.3	25	
	Mathematics	3.4	3.7	30	1
	Social Science	14.8	13.1	30	2
	Anthropology				
	Economics				
	Geography				
	History				
	Humanities				
	Orientation	6.3	6.7		
	Philosophy				
	Political Sci.				
	Psychology				
	Sociology				
	Other				
	Total: Soc.Sci.	21.1	19.8		
	Total: "Academic"				
ART	Apprec., Hist., Theory	1.4	1.5	48	1
	Drawing-Paint.	7.8	5.6	24	1
	Crafts				
	Photography Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	.9	.6	30 30	
	Choral	.7	.6	75	1
	Instrumental Practice Grps.				
PHYSICAL EDUCATION	Health Education				
	Hygiene				
	First Aid			50	
	Coaching				
	READING LAB			20	
	JOURNALISM	1.3	1.9	10	2

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	SHORTHAND			20	
	Acct., Bkkpg.	1.5	2.6	30	1
	Typing, Shorthnd.	3.0	5.3	36	1
	Off. Trng. (Mach.)	2.6	3.2	20	1
	Business Eng.				
	Law, Math., Etc.	1.8	1.4	30	
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	1.0	1.1	24	
	Sales				
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact. Lecture	2.0	2.1	48	1
	Lab.	6.0	4.3		
	Anatomy, Physiol. Lecture	.8	.5	48	1
	Lab.	2.3	.8	24	1
	Botany, Natr. Stdy. Lecture				
	Lab.				
PHYSICAL SCIENCE	Physical Science Lecture				
	Lab.				
	Geology Lecture	5.2	4.1	48	
	Lab.				
	Astronomy				
	Meteorology				
	Chemistry Lecture	1.5	1.6	96	1 LT
	Lab.	4.3	3.1	24	1
	Physics Lecture	1.8	1.9	96	
	Lab.	1.5	.5	24	1
ENG.	Strength of Mat. Stat.			30	
	Engineering Drw.	4.0	4.2	30	1
	Surveying	1.6	.7	24	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd. School	4.0	7.1	24	1
	Aero Flt. Prog.				
	Architectural Drafting				
	Aviation Mechan.				
	Agriculture Lecture				
	Lab.				
	Building Trades				
	Electronics Lecture			24	1
	Lab.				
	Law Enforcement				
	Technical Draft.				
	Shops TRADE			30	1
	Automotive	4.2	3.7	24	1
	Machine				
	Metals				
	Welding				
	Refrig.				
	Other WOOD			24	1
HOME EC. & NURSING	Home Econ. Lecture	3.2	4.8	30	
	Lab.			24	2
	Nursing R.N. Program				
	L.V.N. Program	11.2	10.2	16	1
	XXXXXXXXXX-LAB	14.2	8.7		
	Med. Asst.				

Total Rooms Needed	29
Large Lecture (Little Theatre)	2
Standard Classrooms	15
Special Classrooms & Shops	6
Labratories	6

NAME OF SCHOOL: LOS ANGELES VALLEY COLLEGE — LOCATION: VAN NUYS, CALIFORNIA

Student Hours per Week 53,225 (Exclude P.E. not in classroom)

Enrollment: October 1959 2,343 (3657 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 6,442 Adult: 1,613

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	10.82	10.17	35	14
	Drama-Speech	3.37	3.70	35	7
	Foreign Language	6.01	5.78	40	7
	Mathematics	11.23	9.23	40	11
	Social Science	11.46	10.54		1 LT
	Anthropology				
	Economics				
	Geography	1.09	1.09		
	History	1.03	1.11		
	XXXXXXXXXX STAT.	.05	.05		
	Orientation				
	Philosophy	1.46	1.39		
	Political Sci.	.89	.89		
	Psychology	7.66	7.39		
	Sociology	1.75	1.61		
	Other EDUC.	.29	.29	45	
	LIBRARY SCI.	.01	.01	45	1
	Total: Soc.Sci.	25.68	24.36	45	26
	Total: "Academic"				67
ART	Apprec., Hist., Theory	2.82	2.58	90	1 LL
	Drawing-Paint.	.10	.10	26	4
	Crafts				
	Photography				
	Lecture	.06	.06	25	1
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	1.50	1.38	45	3
	Choral	1.10	1.10	45	1
	Instrumental Practice Grps.	.74	.74	45	1
PHYSICAL EDUCATION	Health Education	3.15	3.15	45	1
	Hygiene				
	First Aid				
	Coaching				
	READING LAB	.22	.22	20	1
	JOURNALISM	.52	.52	45	2

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	SHORTHAND			45	2
	Acct., Bkkpg.	1.53	1.53	42	2
	Typing, Shorthnd.	3.52	3.52	45	3
	Off. Trng. (Mach.)	.34	.34	35	1
	Business Eng.				
	Law, Math., Etc.	.46	.46	45	1
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	.32	.32	45	
	XXXXXXGEN BUS	2.05	2.33	45	3
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	1.60	1.8	34	2
	Lab.	1.48	1.8		
	Anatomy, Physiol.				
	Lecture	.11	.90	32	1 LL
	Lab.	.23	.90		
	Botany, Natr. Stdy.				
	Lecture	.18	.18	35	
	Lab.	.36	.36	35	6
PHYSICAL SCIENCE	Physical Science				
	Lecture				
	Lab.	.27	.27		
	Geology				
	Lecture	.98	.98		
	Lab.				
	Astronomy	.45	.45	40	2
	Meteorology				
	Chemistry				
	Lecture	3.05	2.78	90	2 LL
	Lab.	5.55	5.18	32	9
	Physics				
	Lecture	1.65	1.39	50	1
	Lab.	.90	.72	32	3
ENG.	Strength of Mat.				
	Stat. LECT.	1.02	1.02	40	2
	Engineering Drw.	2.84	2.84	32	5
	Surveying	.59	.59	31	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd. School				
	Aero Flt. Prog.				
	Architectural Drafting				
	Aviation Mechan.				
	Agriculture				
	Lecture				
	Lab.				
	Building Trades				
	Electronics				
	Lecture	.65	2.25	25	3
	Lab.	.43	1.89	25	5
	Law Enforcement	.94	.94	50	1
	Technical Draft.				
	Shops				
	Automotive				
	Machine				
	Metals				
	Welding				
	Refrig.				
	Other BROADCAST	.08	.08	15	1
HOME EC. & NURSING	Home Econ.				
	Lecture	.62	.62	32	1
	Lab.	.16	.36	32	1
	Nursing				
	R.N. Program				
	L.V.N. Program				
	Dental Asst.				
	Med. Asst.				

Total Rooms Needed	143
Large Lecture (Little Theatre)	5
Standard Classrooms	90
Special Classrooms & Shops	18
Labratories	30

NAME OF SCHOOL: MT. SAN ANTONIO — LOCATION: POMONA, CALIFORNIA

Student Hours per Week 49,091 (Exclude P.E. not in classroom)

Enrollment: October 1959 2,454 (4,120 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 3,042 Adult: 621

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	6.5	6.5	35	8
	Drama-Speech	2.2	2.2	32	4
	Foreign Language	4.0	4.5	40	5
	Mathematics	5.8	5.8	35	8
	Social Science				
	Anthropology				
	Economics				
	Geography				
	History				
	Humanities				
	Orientation				2
	Philosophy				
	Political Sci.				
	Psychology				
	Sociology				
	Other				
	Total: Soc.Sci.	24.0	24.0	50	24
	Total: "Academic"				51
ART	Apprec., Hist., Theory	1.2	1.2	50	1
	Drawing-Paint.	2.2	2.2	20	5
	Crafts				
	Photography				
	Lecture	.1	.1	20	
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	1.4	1.4	40	2
	Choral	1.6	1.6	100	1 LL
	Instrumental				
	Practice Grps.			30	1
PHYSICAL EDUCATION	Health Education	2.0	2.0	50	2
	Hygiene				
	First Aid	.6	.6	30	1
	Coaching	.2	.2	30	
	READING LAB	.1	.1	35	1
	JOURNALISM	.3	.3	35	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	SHORTHAND	1.0	1.0	37	2
	Acct., Bkkpg.	1.0	1.0	40	2
	Typing, Shorthnd.	2.0	2.0	40	3
	Off. Trng. (Mach.)	.7	.7	25	2
	Business Eng.	4.0			
	Law, Math., Etc.	4.0	4.0	37	5
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	2.0	2.0	37	3
	Sales				
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	4.0	4.0	80	2 LL
	Lab.	3.7	3.7	30	6
	Anatomy, Physiol.				
	Lecture	.2	.2	50	
	Lab.	.8	.8	32	1
	Botany, Natr. Stdy.				
	Lecture				
	Lab.				
PHYSICAL SCIENCE	Physical Science				
	Lecture				
	Lab.				
	Geology				
	Lecture	1.6	1.4	50	1
	Lab.	1.7	1.7	32	3
	Astronomy				
	Meteorology				
	Chemistry				
	Lecture	2.6	2.4	76	2
	Lab.	4.5	4.4	32	7
	Physics				
	Lecture	.6	.5	40	1
	Lab.	.8	.7	20	5
ENG.	Strength of Mat.				
	Stat.	.3	.3	35	
	Engineering Drw.	.9	.7	25	2
	Surveying	.4	.4	25	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	LECTURE	1.5	1.5	35	3
	Aero [illegible] LAB	2.1	2.1	35	4
	Aero Flt. Prog.				
	Architectural Drafting	1.8	1.9	25	4
	Aviation Mechan.				
	Agriculture				
	Lecture	.1	.1	35	
	Lab.				
	Building Trades				
	Electronics				
	Lecture			35	
	Lab.	2.4	2.4	25	5
	Law Enforcement				2
	Technical Draft.				
	Shops LABS				
	Automotive	1.3	1.4	35	2
	Machine	1.2	1.3	25	2
	Metals				
	Welding				
	Refrig.				
	Other SHOP LECT	1.2	1.3	25	3
HOME EC. & NURSING	Home Econ.				
	Lecture	.7	.7	30	2
	Lab.	.7	.7	24	3
	Nursing LECT.	.3	.3	50	1
	R.N. Program LAB	.3	.3	32	1
	L.V.N. Program	.5	.5	50	1
	[illegible] LAB.	.9	.9	32	2
	Med. Asst.				

Total Rooms Needed	149
Large Lecture (Little Theatre)	5
Standard Classrooms	82
Special Classrooms & Shops	21
Labratories	41

NAME OF SCHOOL: ORANGE COAST — LOCATION: COSTA MESA

Student Hours per Week 37,995 (Exclude P.E. not in classroom)

Enrollment: October 1959 1,792 (7,020 IN 1970) (Students carrying 12 or more units from Cpt. report)

1959 ADA Total: 3,180 Adult: 823

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	10.5	10.3	30/35	18/16
	Drama-Speech	1.3	1.3	30	3
	Foreign Language	3.2	3.8	40	5
	Mathematics	6.2	6.2	25/40	14/9
	Social Science				
	Anthropology				
	Economics	1.4	1.4	35	3
	Geography	1.1	1.1	135	2
	History	6.4	6.4	+ 25	4
	Humanities				
	Orientation				
	Philosophy	.6	.6	35	1
	Political Sci.	1.0	.9	135	2
	Psychology	7.9	7.9	+ 30	14
	Sociology	1.4	1.3	35	2
	Other THEAT ARTS	1.0	1.0	30	2
	+ LECTURE HALLS			300	3 LL
	Total: Soc.Sci.	20.8	20.6		31
	Total: "Academic"	42.0	42.2		98
ART	Apprec., Hist., Theory	2.6	2.6	300	1 LL
	Drawing-Paint.	3.5	3.5	30	6
	Crafts			20	11
	Photography				
	Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	.5	.5	300	1 LL
	Choral	1.0	1.0	90	1
	Instrumental Practice Grps.	.9	.9	50	1
PHYSICAL EDUCATION	Health Education	1.5	1.5	35	3
	Hygiene			300	0
	First Aid				
	Coaching				
	READING LAB	.6	.6		
	JOURNALISM	.1	.2		

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	2.1	2.6	30	5
	Typing, Shorthnd.	3.4	3.4	35	5
	Off. Trng. (Mach.)	1.2	1.0	25	2
	Business Eng.				
	Law, Math., Etc.	2.4	2.5	35	4
	Distrib. Educ.				
	Data Process.		.4	25	1
	Human Relations	.2	.2	40	1
	Marketing	1.3	1.1	25	2
	Sales	1.0	.9	40	2
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	2.5	2.5	100	2 LL
	Lab.	1.8	1.8	32	4
	Anatomy, Physiol.				
	Lecture	.5	.5	100	1 LL
	Lab.	.7	.7	32	2
	Botany, Natr. Stdy.				
	Lecture			32	1
	Lab.	.6	.6		
PHYSICAL SCIENCE	Physical Science				
	Lecture	.7	.7	100	1 LL
	Lab.	.6	.6	32	2
	Geology				
	Lecture	.3	.3	100	
	Lab.	.5	.5	25	
	Astronomy	.2	.2	100	
	Meteorology				
	Chemistry				
	Lecture	2.5	2.5	100	1 LL
	Lab.	2.8	2.8	32	6
	Physics				
	Lecture	.4	.4	100	
	Lab.	.5	.4	30	1
ENG.	Strength of Mat.	.2	.2	30	0
	Stat. LAB	.1	.1	24	1
	Engineering Drw.	1.8	1.5	25	3
	Surveying	.3	.3 LEC	75	0
		.4	.4 LAB	15	2

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	BUILDING LEC	.2	.2	25	1
	CONSTR. LAB	1.3	1.3	25	3
	Aero Ord. School				
	Aero Flt. Prog.				
	Architectural LAB	1.5	1.7	25	5
	Drafting LEC	.4	.5	100	-
	Aviation Mechan.				
	Agriculture				
	Lecture	.7	.7	35	1
	Lab.	.8	.8	25	2
	Building Trades				
	Electronics				
	Lecture	1.0	1.2	100	1 LL
	Lab.	2.7	3.1	25	8
	Law Enforcement			35	2
	Technical Draft.				
	Shops PETROLEUM	.9	.7	15	3
	Automotive	1.7	1.6	25	4
	Machine	1.4	1.4	25	4
	Metals	.8	.8	25	2
	Welding				
	Refrig.		.8		
	Other WORK EXPR.	.08	.1	35	1
HOME EC. & NURSING	Home Econ.				
	Lecture	.5	.5	35	1
	Lab.	1.1	1.1	35	2
	Nursing				
	R.N. Program				
	L.V.N. Program	1.5	1.5 LEC	35	2
	[illegible] LAB	1.2	1.2	25	3
	Med. Asst.				
	NURSERY SCHOOL	.1	.1	25	1

Total Rooms Needed	215
Large Lecture (Little Theatre)	11
Standard Classrooms	114
Special Classrooms & Shops	58
Labratories	32

NAME OF SCHOOL: REEDLEY COLLEGE — LOCATION: REEDLEY, CALIFORNIA

Student Hours per Week 14,459 (Exclude P.E. not in classroom)

Enrollment: October 1959 875 (1,355 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 1,287 Adult: 176

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	12.67	12.67	30	
	Drama-Speech	1.85	1.85	25	
	Foreign Language	2.52	3.00	30	
	Mathematics	4.95	4.66	40	
	Social Science				
	Anthropology				
	Economics	.85	.85		
	Geography	.75	.75		
	History	9.24	9.24	100	1 LL
	Humanities				
	Orientation				
	Philosophy	1.04	1.04		
	Political Sci.	.37	.37		
	Psychology	2.77	2.77		
	Sociology	.83	.83		
	Other EDUC.	.33	.33		
				50	11
	Total: Soc.Sci.	16.18	16.18	100	1 LL
	Total: "Academic"				
ART	Apprec., Hist., Theory	3.50	2.50		
	Drawing-Paint.			25	2
	Crafts				
	Photography				
	Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	.98	.98	25	1
	Choral	1.72	1.50	80	1
	Instrumental Practice Grps.	1.27	.77	60	
PHYSICAL EDUCATION	Health Education	4.63	4.63	65	1
	Hygiene				
	First Aid				
	Coaching				
	READING LAB	.54	.54		
	JOURNALISM			15	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	1.60	1.60	30	1
	Typing, Shorthnd.	4.43	4.43	40	2
	Off. Trng. (Mach.)	2.13	3.00	30	1
	Business Eng.				
	Law, Math., Etc.	.92	.92	40	1
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	1.08	1.58	25	
	Sales				
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	1.95	1.95	100	1 LL
	Lab.	3.22	3.22	32	1
	Anatomy, Physiol.				
	Lecture	.59	.59		
	Lab.	.89	.89		
	Botany, Natr. Stdy.				
	Lecture				
	Lab.				
PHYSICAL SCIENCE	Physical Science				
	Lecture	.93	.93		
	Lab.				
	Geology				
	Lecture	.97		70	
	Lab.				1
	Astronomy				
	Meteorology				
	Chemistry				
	Lecture	3.29	3.29	75	
	Lab.	4.35	4.35	32	2
	Physics				
	Lecture	.50	.50	50	1
	Lab.	.44	.44	16	1
ENG.	Strength of Mat.				
	Stat.	.28	.28	70	1
	Engineering Drw.	2.06	2.06	35	1
	Surveying	.46	.46	35	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd. School	8.17	8.17	25	9
	Aero Flt. Prog.				
	Architectural				
	Drafting				
	Aviation Mechan.				
	Agriculture				
	Lecture	.76	.76	50	
	Lab.	1.94	1.94	25	
	Building Trades				
	Electronics				
	Lecture	.81	1.00	50	1
	Lab.			25	
	Law Enforcement				
	Technical Draft.				
	Shops				
	Automotive	2.67	2.67	30	2
	Machine	.33	.33	30	1
	Metals				
	Welding	.39	.39	30	1
	Wood	.21	.21	30	1
	Other				
HOME EC. & NURSING	Home Econ.				
	Lecture	1.55	1.55	32	1
	Lab.			16	1
	Nursing				
	R.N. Program				
	L.V.N. Program				
	Dental Asst.	2.28	2.28	25	2
	Med. Asst.				

Total Rooms Needed	44
Large Lecture (Little Theatre)	2
Standard Classrooms	24
Special Classrooms & Shops	10
Labratories	8

NAME OF SCHOOL: SAN DIEGO JUNIOR COLLEGE (KEARNEY MESA) LOCATION: SAN DIEGO, CALIF.

Student Hours per Week 62,566 (Exclude P.E. not in classroom)

Enrollment: October 1959 2,977 (K.M. 2,500 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 5,650 Adult: 1,673

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	ENGLISH			30	3
	English	8.76	8.00	100	1 LL
	Drama-Speech	1.73	1.98	30	3/1 LT
	Foreign Language	1.36	.95	30	1
	Mathematics	11.69	9.45	35	4
	Social Science				
	Anthropology				
	Economics				
	Geography				
	History				
	Humanities				
	Orientation				
	Philosophy				
	Political Sci.				
	Psychology				
	Sociology				
	Other				
				30	5
	Total: Soc.Sci.	12.64	15.15	100	3 LL
	Total: "Academic"				14
ART	Apprec., Hist., Theory				
	Drawing-Paint.	1.60	2.54	27	2
	Crafts				
	Photography				
	Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	.56	2.06	30	
	Choral				1
	Instrumental Practice Grps.				1
PHYSICAL EDUCATION	Health Education	1.64	1.75	35	1
	Hygiene				
	First Aid				
	Coaching	9.07	8.58	40	4
	RECREATION	.45	.35	40	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	SHORTHAND	.11	.91	30	1
	Acct., Bkkpg.	2.88	3.85	30	2
	Typing, Shorthnd.	4.12	2.03	40	1
	Off. Trng. (Mach.)	2.40	2.54	25	2
	Business Eng.				
	Law, Math., Etc.	1.73	2.42	35	1
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	.88			
	Sales				
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	2.16	3.44	90	1 LL
	Lab.	1.45	3.19	30	2
	[illegible]				
	Lecture TECH SCI	1.13	.76	90	1 LL
	Lab.				
	Botany, Natr. Stdy.				
	Lecture				
	Lab.				
PHYSICAL SCIENCE	Physical Science				
	Lecture	1.13	1.28	90	
	Lab.		.49	30	1
	Geology				
	Lecture	.91	1.60		
	Lab.				
	Astronomy				
	Meteorology				
	Chemistry				
	Lecture	.55	1.35	90	
	Lab.	1.28	1.88	30	1
	Physics				
	Lecture	.45	1.28	30	
	Lab.	.45	1.28	90	1
ENG.	Strength of Mat.				
	Stat.				
	Engineering Drw.				
	Surveying				

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd. School	2.13	6.36		
	Aero Flt. Prog.				
	Architectural Drafting	3.59	2.19	27	2
	Aviation Mechan.				
	Agriculture				
	Lecture				
	Lab.				
	Building Trades				
	Electronics				
	Lecture	3.16	6.60	27	5
	Lab.				
	Law Enforcement				
	Technical Draft.				
	Shops	15.03	4.99	27	6
	Automotive				
	Machine				
	Metals				
	Welding				
	Refrig.				
	Other				
HOME EC. & NURSING	Home Econ.				
	Lecture				
	Lab.			27	1
	Nursing				
	[illegible] Program LECT.			30	1
	L.V.N. Program LAB.			30	1
	Dental Asst.				
	Med. Asst.				

Total Rooms Needed	60
Large Lecture (Little Theatre)	8
Standard Classrooms	28
Special Classrooms & Shops	15
Labratories	9

NAME OF SCHOOL: COLLEGE OF SAN MATEO — LOCATION: SAN MATEO, CALIFORNIA

Student Hours per Week 51,558 (Exclude P.E. not in classroom)

Enrollment: October 1959 2,291* (2,830 IN 1961)(6,000 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 3,966 Unit: 964

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	14.6	14.6	30	12
	Drama-Speech	2.0	2.0	15	3
	Foreign Language	2.9	2.9	27	3
	Mathematics	7.7	7.7	28	8
	Social Science		Sp.	400	1 LL
	Anthropology				
	Economics				
	Geography				
	History				
	Humanities				
	Orientation	.8	.8	35	1
	Philosophy				
	Political Sci.				
	Psychology				
	Sociology				
	Other READING LAB	.1	.1	20	1
	JOURNALISM	.1	.1	20	1
	Total: Soc.Sci.	17.0	17.0	35	13
	Total: "Academic"	45.0	45.0		40
ART	Apprec.,Hist., Theory	.6	.6	40	1
	Drawing-Paint.	3.4	3.4	18	4
	Crafts			18	1
	Photography Lecture				
	Lab.	.6	.6	16	1
MUSIC	Lecture Hist.,Theory, Appreciation	.9	.9	35	2
	Choral	.3	.3	80	1
	Instrumental Practice Grps.	.6	.6	60	1
PHYSICAL EDUCATION	Health Education				
	Hygiene			35	1
	First Aid				
	Coaching				

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	3.0	3.0	30	2
	Typing, Shorthnd.	3.6	3.6	36	2
	Off. Trng.(Mach.)	1.6	1.6	18	2
	SHORTHAND			36	1
	Law, Math.,Etc.	2.2	2.2	35	2
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	.3	.3	25	1
	I.B.M.	.5	.5	15	1
	Work Experience				
LIFE SCIENCE	Biol.,Zool.,Bact. Lecture	2.6	2.6	60	2
	Lab.	3.0	3.0	30	4
	Anatomy,Physiol. Lecture	.2	.2	60	
	Lab.	.1	.1	30	
	Botany,Natr.Stdy. Lecture				ABOVE
	Lab.				
PHYSICAL SCIENCE	Physical Science Lecture				
	Lab.				
	Geology Lecture				
	Lab.				
	Astronomy & GEOLOGY	1.5	1.5	25	1 LAB
	Meteorology	2.7	2.7	50	1 LEC
	Chemistry		RECITATION		2
	Lecture	3.6	3.6	60	2
	Lab.	5.6	5.6	30	6
	Physics Lecture	2.7	2.7	50	2
	Lab.	1.2	1.2	25	3
ENG.	Strength of Mat.	.6	.6	35	1
	Stat. LAB			17	2
	Engineering Drw.	3.1	3.1	30	4
	Surveying	.7	.7	60	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	LECTURE	.6	.6	30	1
	Aero Grd.School	.8	.8	20	1
	Aero Flt. Prog.				
	Architectural Drafting	.2	.2	30	1
	Aviation Mechan.				
	Agriculture LINK Lecture TRAINER			12	1
	Lab.				
	Building Trades				
	Electronics				
	Lecture	.5	.5	30	2
	Lab.	.8	.8	30	1
	Law Enforcement				
	Technical Draft.				
	Shops	.5	.5		
	Automotive LECTURE			24	2
	Machine			24	1
	Metals			20	1
	Welding			20	1
	PLUMBING			20	1
	Other CARPENTRY			20	1
HOME EC. & NURSING	COSMETOLOGY	3.2	3.2	50	2
	Home Econ.				
	Lecture	.1	.1	30	1
	Lab.	.6	.6	24	2
	Nursing				
	R.N. Program			35	1
	L.V.N. Program			30	1
	Dental Asst.	1.7	1.7	75	1
	LAB				1

Total Rooms Needed	118
Large Lecture (Little Theatre)	3
Standard Classrooms	64
Special Classrooms & Shops	27
Labratories	24

NAME OF SCHOOL: SANTA ROSA JUNIOR COLLEGE

LOCATION: SANTA ROSA, CALIFORNIA

Student Hours per Week 29,565 (Exclude P.E. not in classroom)

Enrollment: October 1959 1,331 (2,500 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 2,122 Unit: 337

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	LIBRARY SCIENCE	.05	.05	20	LIB
	English	9.86	12.00	30	8
	Drama-Speech	2.12	2.00	35/20	2
	Foreign Language	4.22	4.22	35	2
	Mathematics	5.30	5.10	35	3
	Social Science				
	Anthropology	1.93	1.50	140	1 LL
	Economics	1.21	1.21	40	1
	Geography	.85	.55	50	
	History	6.69	6.69	150/40	
	Humanities				
	Orientation	.42	1.00	40	1
	Philosophy	1.08	1.50	50	
	Political Sci.	1.53	1.20	150/40	1 LL
	Psychology	2.12	2.00	150/40	
	Sociology	.55	.35	50	
	Other				
					2 LL
	Total: Soc.Sci.	16.38	16.00		3
	Total: "Academic"				18
ART	Apprec., Hist., Theory	1.48	1.18	50	1
	Drawing-Paint.	3.50	3.40	30	3
	Crafts				
	Photography				
	Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	2.60	2.00	90	1 LL
	Choral	.82	.80	90	
	Instrumental Practice Grps.	1.04	.80	50	1
PHYSICAL EDUCATION	Health Education				
	Hygiene	3.32	3.50	140	1 LL
	First Aid	.91	.70	30	1
	Coaching	.48	.30	30	1
	JOURNALISM	.33	.20	12	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	3.06	3.06	40	2
	Typing, Shorthnd.	5.26	5.20	36	4
	Off. Trng. (Mach.)	3.31	3.31	30	2
	Business Eng.	1.09	1.09	40	1
	Law, Math., Etc.	1.20	1.20	40	1
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	1.05	1.35	50	
	Sales				
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	2.09	2.09	96	1 LL
	Lab.	1.76	1.76	24	2
	Anatomy, Physiol.				
	Lecture	.39	.39	72	
	Lab.	.36	.36	24	1
	Botany, Natr. Stdy.				
	Lecture	1.20	1.20	72	
	Lab.	1.95	1.95	24	1
PHYSICAL SCIENCE	Physical Science				
	Lecture	.50	.70	96	
	Lab.	.57	.77	24	1
	Geology				
	Lecture	.83	.80	60	1
	Lab.				
	Astronomy		.40	50	1
	Meteorology				
	Chemistry				
	Lecture	1.78	1.78	96	1 LL
	Lab.	3.47	3.60	24	4
	Physics				
	Lecture	1.97	1.97	72	1
	Lab.	1.36	1.36	24	2
ENG.	Strength of Mat. Stat.	.80	.50	40	2
	Engineering Drw.	2.00	1.70	40	2
	Surveying	.64	.50	25	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	NAVIGATION	.21	.00	30	0
	Aero Grd. School	.39	.00	30	0
	Aero Flt. Prog.				
	Architectural Drafting				
	Aviation Mechan.				
	Agriculture				
	Lecture				
	Lab.				
	Building Trades				
	Electronics				
	Lecture				1
	Lab.				1
	Law Enforcement	1.30	1.50	24	1
	Technical Draft.				
	Shops				1 LL
	Automotive	.91	.81	20	1 LL
	Machine	.99	.88	15	1 LL
	Metals	.42	.30	20	1 LL
	Welding	.20	.30	20	1
	Refrig.				
	Other				
HOME EC. & NURSING	Home Econ.				
	Lecture	1.15	.90	40	1
	Lab.	.64	.50	20	1 LL
	Nursing			20	1 LL
	R.N. Program	1.65	1.80	8	
	L.V.N. Program	1.95	2.00	18	3
	Dental Asst.	.51	1.00	25	1
	Med. Asst.				
	Total Rooms Needed				76
	Large Lecture (Little Theatre)				6
	Standard Classrooms				34
	Special Classrooms & Shops				21
	Labratories				15

NAME OF SCHOOL: SIERRA COLLEGE — LOCATION:

Student Hours per Week 12,181 (Exclude P.E. not in classroom)

Enrollment: October 1959 684 (1,816 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 788 Full:

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	9.53	9.00	30	5
	Drama-Speech	3.09	3.00	25	2
	Foreign Language	3.00	3.50	35	1
	Mathematics	7.47	7.00	40	3
	Social Science				
	Anthropology				
	Economics	2.02	2.00		
	Geography				
	History	8.00	7.50		
	Humanities				
	Orientation				
	Philosophy	.66	.66		
	Political Sci.	1.35	1.25		
	Psychology	3.85	3.85		
	Sociology	1.65	1.55		
	Other				
	Total: Soc.Sci.	16.53	16.81	50	6
	Total: "Academic"				17
ART	Apprec., Hist., Theory	.71	1.00	60	
	Drawing-Paint.	3.35	3.50	24	3
	Crafts				
	Photography				
	Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	.53	.53	60	1
	Choral	1.32	1.00	50	1
	Instrumental Practice Grps.				
PHYSICAL EDUCATION	Health Education				
	Hygiene	3.84	3.84	50	2
	First Aid			50	
	Coaching	.53	.53		
	READING LAB	2.40	2.00	25	1
	JOURNALISM	.45	.45	30	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	2.87	2.50	35	2
	Typing, Shorthnd.	4.69	4.69	40	2
	Off. Trng. (Mach.)	2.87	2.50	25	2
	Business Eng.	.44	.44		
	Law, Math., Etc.	1.97	1.97	42	1
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	.22	.68	25	1
	INTRO TO BUS	.89	.89		
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	3.04	3.04	72	1 1
	Lab.	1.38	1.38	24	3
	Anatomy, Physiol.				
	Lecture	.69	.50		
	Lab.	.96	.75		
	Botany, Natr. Stdy.				
	Lecture	.44	.40		
	Lab.	1.33	1.20		
PHYSICAL SCIENCE	Physical Science				
	Lecture	1.35	1.35		
	Lab.				
	Geology				
	Lecture	1.90	2.00	100	
	Lab.				
	Astronomy				
	Meteorology				
	Chemistry				
	Lecture	2.41	2.25	72	1
	Lab.	5.27	5.00	24	4
	Physics				
	Lecture	1.50	1.40	72	1
	Lab.	.79	.70	24	1
ENG.	Strength of Mat. Stat.			40	1
	Engineering Drw.	2.6	2.6	24	2
	Surveying	2.5	2.5	24	2

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd. School				
	Aero Flt. Prog.				
	Architectural Drafting	1.1	1.1	36	1
	Aviation Mechan.				
	Agriculture				
	Lecture	.39	.20	30	1
	Lab.	.22	.10	30	
	Building Trades				
	Electronics				
	Lecture		.50	32	1
	Lab.		1.00	16	1
	Law Enforcement				
	Technical Draft.				
	Shops WOOD			24	2
	Automotive				
	Machine			24	1
	Metals				
	Welding				
	MINING	.41	.20	24	1
	Other MISC.	2.45	5.00		1
HOME EC. & NURSING	Home Econ.				
	Lecture	1.17	1.00	30	1
	Lab.			20	
	Nursing				
	R.N. Program				
	L.V.N. Program			15	
	Dental Asst.				
	Med. Asst.				
	Total Rooms Needed				60
	Large Lecture (Little Theatre)				1
	Standard Classrooms				30
	Special Classrooms & Shops				17
	Labratories				12

NAME OF SCHOOL: STOCKTON COLLEGE — LOCATION: STOCKTON, CALIFORNIA

Student Hours per Week 35,575 (Exclude P.E. not in classroom)

Enrollment: October 1959 1,478 (2,550 IN 1970) (Students carrying 12 or more units from Cot. report)

1959 ADA Total: 2,660 Acts: 431

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	11.65	14.00	30	11
	Drama-Speech	2.97	2.75	25	3
	Foreign Language	3.28	3.50	35	3
	Mathematics	4.88	4.50	35	3
	Social Science				
	Anthropology				
	Economics				
	Geography				
	History				
	Humanities				
	Orientation				
	Philosophy				
	Political Sci.				
	Psychology				
	Sociology				
	Other				
				35	
	Total: Soc.Sci.	17.91	16.00	100	3 LL
	Total: "Academic"				27
ART	Apprec., Hist., Theory	.88	.88	100	
	Drawing-Paint.	4.50	4.50	30	5
	Crafts				
	Photography				
	Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	1.20	1.20	35	1
	Choral	.99	1.00	60	1
	Instrumental Practice Grps.	.75	.75	100	1 LL
PHYSICAL EDUCATION	Health Education				
	Hygiene	2.46	2.46	100	1 LL
	First Aid			35	1
	Coaching				
	READING LAB	1.95	1.00	25	1
	JOURNALISM	.40	.35	20	1

* FULL TIME
12 OR MORE UNITS

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	1.92	1.90	35	1
	Typing, Shorthnd.	4.54	4.00	40	3
	Off. Trng. (Mach.)	1.01	1.00	30	1
	Business Eng.				
	Law, Math., Etc.			35	2
	Distrib. Educ.	2.71	2.60	35	
	Data Process.			40	1
	Human Relations				
	Marketing				
	Sales				
	Work Experience				
LIFE SCIENCE	ALL LIFE SCIENCE Biol., Zool., Bact.				
	Lecture	8.56	8.56	100	1 LL
	Lab.			32	7
	Anatomy, Physiol.				
	Lecture				
	Lab.				
	Botany, Natr. Stdy.				
	Lecture	.44	.40		
	Lab.				
PHYSICAL SCIENCE	Physical Science				
	Lecture	.62	.50		
	Lab.				
	Geology & ASTRONOMY				
	Lecture	.21	.25	100	1 LL
	Lab.	.61	.60	32	1
	Astronomy				
	Meteorology				
	Chemistry				
	Lecture	2.04	2.25	100	1 L L
	Lab.	4.40	4.50	32	4
	Physics				
	Lecture	.41	.50	100	1 LL
	Lab.	.41	.50	32	1
ENG.	Strength of Mat. Stat.	3.53	3.00	100	1 LL
	Engineering Drw.	2.44	2.25	32	4
	Surveying	.32	.25	30	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	AVIATION SHOP Aero Grd. School	.20	.20	35	
	Aero Flt. Prog.				
	Architectural Drafting	.35	.35	35	1
	Aviation Mechan.				
	Agriculture				
	Lecture	.17			1
	Lab.				1
	Building Trades				
	Electronics				
	Lecture	.73	1.00	35	1
	Lab.	2.27	2.50	24	3
	Law Enforcement				
	Technical Draft.				
	Shops WOOD			30	
	Automotive	2.75	2.25	30	2
	Machine	1.06	1.00	30	1
	Metals	.06			
	Welding				
	~~Decorg.~~ PRINTING	.56	.00		
	Other CONSTRUCTION	.81	1.75	30	1
	COSMETOLOGY		2.50	35	2
HOME EC. & NURSING	Home Econ.				
	~~Lecture~~ LAB	1.69	1.60	28	3
	Lab.				
	Nursing				
	R.N. Program				
	L.V.N. Program	1.69	1.60	35	2
	~~Lecture~~ LAB		2.00		
	Med. Asst.				

Total Rooms Needed	88
Large Lecture (Little Theatre)	1C
Standard Classrooms	36
Special Classrooms & Shops	18
Labratories	22

NAME OF SCHOOL: VENTURA

LOCATION: VENTURA, CALIFORNIA

Student Hours per Week 22,236

Enrollment: October 1959 1,158 (2,250 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: 2,197 Unit: 597

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	11.6	11.6	30	7
	Drama-Speech	2.0	2.3	30	7
	Foreign Language	5.0	5.0	35	3
	Mathematics	9.6	9.6	35	5
	Social Science	15.7	15.7	45	(6) SEE BELOW
	Anthropology				
	Economics				
	Geography				
	History				
	Humanities				
	Orientation	2.7	2.7	45	1
	Philosophy				
	Political Sci.				
	Psychology				
	Sociology				
	Other JOURN.	.3	.3	30	1
	READING LAB	.5	1.0	20	1
	Total: Soc.Sci.	18.4	18.2	45	7
	Total: "Academic"				23
ART	Apprec., Hist., Theory	1.0	1.0	45	1
	Drawing-Paint.	3.1	3.0	24	2
	Crafts	.8	.8	24	1
	Photography Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	1.6	1.6	40	1
	Choral	.4	.4	30	1
	Instrumental Practice Grps.	.4	.4		1
PHYSICAL EDUCATION	Health Education			35	
	Hygiene				
	First Aid				
	Coaching				

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	2.3	2.3	35	1
	Typing, Shorthnd.	5.9	5.9	40	3
	Off. Trng. (Mach.)	.7	.7	26	1
	Business Eng.				
	Law, Math., Etc.	1.7	1.7	45	1
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing			45	
	Sales SHORTHAND			30	
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact. Lecture	4.2	4.2	50	2
	Lab.	2.3	2.3	27	2
	Anatomy, Physiol. Lecture	.3	.3		
	Lab.	.2	.2		
	Botany, Natr. Stdy. Lecture				
	Lab.				
PHYSICAL SCIENCE	Physical Science Lecture				
	Lab.				
	Geology Lecture				
	Lab.				
	Astronomy)	1.3	1.3	45	1 LEC
	GEOL)			10	LAB
	Chemistry Lecture	2.7	2.7	45	1
	Lab.	4.3	4.3	26	3
	Physics Lecture	1.9	1.9	50	1
	Lab.	1.3	1.3	24	1
ENG.	Strength of Mat. Stat.	3.1	3.1	45	1
	Engineering Drw.	2.1	5.2	25	2
	Surveying			20	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd.School				
	Aero Flt. Prog.				
	Architectural Drafting				
	Aviation Mechan.				
	Agriculture Lecture	1.1	1.2	24	1
	Lab.	.8	.9	24	1
	Building Trades				
	Electronics Lecture			28	1
	Lab.			28	
	Law Enforcement	.7	1.0		
	Technical Draft.				
	Shops	5.8	5.8		
	Automotive			25	2
	Machine			25	1
	Metals				
	Welding			25	1
	Refrig.				
	Other				
HOME EC. & NURSING	Home Econ.				
	Lecture	.9		30	
	Lab.	.3	1.2	24	1
	Nursing				
	R.N. Program				
	L.V.N. Program	2.3	2.3	26	2
	Dental Asst.				
	Med. Asst.				

Total Rooms Needed	69
Large Lecture (Little Theatre)	
Standard Classrooms	43
Special Classrooms & Shops	14
Labratories	12

NAME OF SCHOOL: YUBA COLLEGE — LOCATION: MARYSVILLE, CALIFORNIA

Student Hours per Week 16,700 (Exclude P.E. not in classroom)

Enrollment: October 1959 951 (1,500 IN 1970) (Students carrying 12 or more units from Oct. report)

1959 ADA Total: Adult:

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
LIBERAL ARTS OR COURSES USING NON-SPECIALIZED CLASSROOMS	English	11.8	11.8	25	5
	Drama-Speech	.9	.9	20	1 LT
	Foreign Language	1.7	1.7	28	1
	Mathematics	6.4	6.4	28	3
	Social Science				
	Anthropology				
	Economics	1.1	1.1		
	Geography	.8	1.0		
	History	3.8	3.8		
	Humanities				
	Orientation				
	Philosophy	2.04	2.04		
	Political Sci.	4.6	4.4		
	Psychology	4.4	4.4		
	Sociology	1.5	1.5		
	Other ALL			40	2
	"			125	1 LL
	Total: Soc.Sci.	18.24	18.24		
	Total: "Academic"				
ART	Apprec., Hist., Theory	2.3	2.3	60	1
	Drawing-Paint.	2.9	2.9	20	2
	Crafts			18	
	Photography				
	Lecture				
	Lab.				
MUSIC	Lecture Hist., Theory, Appreciation	1.6	1.6	60	
	Choral	.9	.9	40	1
	Instrumental Practice Grps.	.4	.4	30	1
PHYSICAL EDUCATION	Health Education	OMITTED			
	Hygiene	OMITTED			
	First Aid				
	Coaching				
	READING LAB	.4	.4	20	1
	JOURNALISM			20	1

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
BUSINESS	Acct., Bkkpg.	3.14	3.15	28	1
	Typing, Shorthnd.	5.20	5.20	40	2
	Off. Trng. (Mach.)	1.34	1.34	24	1
	Business Engl.	.30	.30		
	Law, Math., Etc.	3.90	3.90	32	2
	Distrib. Educ.				
	Data Process.				
	Human Relations				
	Marketing	1.20	1.20		
	Sales				
	Work Experience				
LIFE SCIENCE	Biol., Zool., Bact.				
	Lecture	1.90	1.90	72	1
	Lab.	4.30	4.30	24	1
	Anatomy, Physiol.				
	Lecture	.20	.20	72	
	Lab.	.40	.40	24	
	Botany, Natr. Stdy.				
	Lecture	.97	.97	72	
	Lab.			24	3
PHYSICAL SCIENCE	Physical Science				
	Lecture	2.30	1.40	72	
	Lab.				
	Geology				
	Lecture		1.00		
	Lab.				
	Astronomy		1.00	28	1
	Meteorology				
	Chemistry				
	Lecture	2.60	2.60	72	
	Lab.	4.40	4.40	24	2
	Physics				
	Lecture	1.30	1.30	72	1
	Lab.	.40	.40	24	1
ENG.	Strength of Mat. LAB			18	1
	Stat.	.60	.60	24	1
	Engineering Drw.	3.15	3.15	28	2
	Surveying	.20	.20	18	

	Department Courses	%Curriculum Emphasis 1959	%Curriculum Emphasis Future	Class Size	No. Rms.
VOCATIONAL, TECHNICAL AND INDUSTRIAL	Aero Grd.School				
	Aero Flt. Prog.				
	Architectural				
	Drafting				
	Aviation Mechan.				
	Agriculture				
	Lecture	1.30	1.30	24	1
	Lab.	1.20	1.20	24	1
	Building Trades				
	Electronics				
	Lecture				
	Lab.				
	Law Enforcement				
	Technical Draft.				
	Shops				
	Automotive	1.38	1.38		1
	Machine	.60	.60		
	Metals				
	Welding	.01	.01		1
	Refrig.				
	Other				
HOME EC. & NURSING	Home Econ.				
	Lecture	2.50	2.50	24	1
	Lab.	.30	.30	24	1
	Nursing				
	R.N. Program				
	L.V.N. Program	5.86	5.86	24	1
	~~xxxxxxxxxx~~ LAB				1
	Med. Asst.				

Total Rooms Needed	47
Large Lecture (Little Theatre)	2
Standard Classrooms	20
Special Classrooms & Shops	14
Labratories	11

CHAPTER IV

I. NORMATIVE FINDINGS

A. Enrollment. The word "enrollment" as used in this study is the number of students enrolled (at each junior college) carrying 12 or more units of work as reported to the California State Department of Education on the "October (statistical) Report." This excludes all part-time students, all "adult" students and all students enrolled in "classes for adults". In comparing these enrollment figures with the usual use of the term it will be found to be about 30-35% less than the figure usually quoted. For example, one typical junior college which usually indicates to the press that it has a day time enrollment of 1750, reported to the state that its "full-time enrollment" was 1331. This ratio is fairly typical of the schools in this study and should be borne in mind in comparing these figures with other studies which give a definite number of rooms needed for a stated enrollment.

1. Full time student enrollment for October 1959:

   Mean for 17 schools, 1548

2. Full time enrollment, estimated for 1970:

   Mean, 3012

   Indicating an anticipated growth of 94.9% between 1959 and 1970 for the 17 junior colleges studied.

B. A.D.A. or Average Daily Attendance.

This is legally defined in the California State Education Code, 1959 edition, section 11451. It is generally computed for California

Junior colleges by multiplying the total number of students times the number of hours attended, divided by 525.

Total A.D.A. (including Adult A.D.A.)	2850	Mean for all schools
Adult A.D.A.	637	" " " "
Total less Adults	2213	" " " "

C. Students Hours per week

It is the opinion of the writer that more significant than " enrollment" or "A.D.A." in comparing schools is the figure used for student/hours/week. This figure represents the total number of students enrolled during the first week of October, times the number of class hours attended (between 8:00 a.m. and 5:00 p.m.) during one full school week. Since this study is primarily concerned with space needs for a given curriculum and specific enrollment, the figure for student/hours/week yields a more valid figure for use in comparing the 17 junior colleges studied.

Average Student Hours per Week for the schools studied:

32,406 student hours per week during October 1959.

D. Curriculum Emphasis

In Table I on the next page will be found the normative data for percentage curriculum emphasis. This was determined by dividing the total student hours per week in each course (or group of similar courses) by the total student hours per week. The data for each school appeared in Chapter III. Table I shows the arithmetic mean for each subject for all the schools studied. Several difficulties became apparent in attempting to achieve statistical

validity. For instance it was discovered that not all schools classified their courses under the same major headings. A course such as "Surveying" might appear as part of the lower division transfer engineering course at one institution but as part of the terminal or trade and industrial education at another junior college. The institutions own designations were respected in all cases where it was possible to do so, for although the two classes bore the same Title, obviously the subject matter, the degree of difficulty of the class, the standards for grading, etc. would probably differ as much as they ordinarily would for transfer and terminal courses.

Another problem was the determination of the norm for each subject. There was no problem in regard to courses that were common to each school. It was only necessary to total all the individual percentages for this course at each school and divide by 17. (The total number of schools involved in the study.) However, in a subject such as Aeronautics, which was found at only five schools, if the total is divided by 5 we arrive at the average percentage curriculum emphasis for these schools only. Because of the tremendous diversification of terminal, trade and industrial courses found at the junior colleges (each one attempting to meet the needs of the local industries in their communities) if this procedure were used our totals would be in excess of 100%. Therefore all subject areas were in each case divided by 17 so that the percentage indicated for each course in Table I is representative

of a "composite" school offering all these classes. The "range" indicates the range only for those schools offering these classes. The low figure in each range is actually "0" except for the few courses common to all schools such as English, History, Mathematics, Business, etc.

Table I
Curriculum Emphasis

AVERAGE PERCENTAGE OF STUDENT HOURS PER WEEK FOR EACH SUBJECT IN ALL SCHOOLS

	Department Courses	1959	1970	1959 Range	1970 Range
Liberal Arts or Courses Using Non-Specialized Classrooms	English	11.20	11.24	6.5-14.6	6.5-14.6
	Drama-Speech	2.04	2.09	.90-3.37	1.3-3.7
	Foreign Language	3.23	3.51	1.30-6.01	.95-5.78
	Mathematics	7.79	7.34	3.40-13.3	3.7-11.0
	Social Science	3.54	3.58	11.46-15.7	10.54-15.7
	Anthropology	.79	.75	.80-1.93	.80-1.50
	Economics	.63	.61	.85-2.02	.85-2.02
	Geography	.40	.46	.75-1.10	.75-1.20
	History	3.82	3.78	1.03-9.70	1.11-9.70
	Humanities	.04	.06	.60	1.00
	Orientation	.78	1.00	.42-6.30	.80-6.70
	Philosophy	.89	.91	.60-5.88	.60-5.88
	Political Sci.	.87	.83	.37-4.60	.40-4.40
	Psychology	2.75	2.73	2.11-8.59	2.00-8.59
	Sociology	.77	.74	.55-1.75	.35-1.62
	Other: Education	.12	.12	.20-1.00	.20-1.00
	Journalism	.32	.36	.93-1.30	.20-1.90
	Reading Lab.	.61	.58	.10-2.40	.10-2.00
	Theater Arts	.59	.59	1.00	1.00
	Total: Soc. Sci.	15.28	15.45	12.64-25.68	15.15-24.4
	Total: "Academic"	41.18	41.28	40.0-50.9	40.6-50.9
Art	Apprec., Hist. Theory	1.44	1.42	.40-3.30	.40-2.58
	Drawing-Painting	2.36	2.31	.10-7.80	.10-5.60
	Crafts	.32	.33	.80-2.98	.80-2.98
	Photography Lect.	.01	.01	.06- .10	.06- .10
	Lab	.04	.04	.06- .60	.06- .60
	Total	4.17	4.11		
Music	Lecture, History Theory, Apprec.	1.19	1.21	.53-2.60	.53-2.60
	Choral	.81	.77	.30-1.72	.40-1.72
	Instrumental	.59	.60	.40-1.27	.40-1.27
	Total	2.59	2.58		
Physical Education	Health Education	1.12	1.10	.20-3.15	.20-3.15
	Hygiene	.79	.80	1.50-3.84	1.50-3.84
	First Aid	.28	.29	.19-2.30	.19-2.30
	Coaching	.60	.57	.20-9.07	.20-8.58
	Recreation	.03	.02	.45- .45	.35- .35
	Total	2.82	2.78		

	Department Courses	1959	1970	1959 Range	1970 Range
Business	Business (Gen.)	.14	.14	2.05-2.05	2.33-2.33
	Acct.-Bkkpg.	2.26	2.43	1.00-3.21	1.00-3.85
	Typ.-Shorthand	4.00	4.02	2.00-5.26	2.00-5.90
	Off. Trng. (Mach.)	1.54	1.68	.34-3.31	.34-3.31
	Bus. English	.13	.13	.30-1.09	.30-1.09
	Law, Math	1.79	1.81	.46-4.00	.46-4.00
	Distrib. Educ	.16	.15	2.71-	2.60-
	Advertising	.02	.02	.32- .32	.32- .32
	Data Process.	.21	.22	.80-2.71	.40-2.60
	Human Relations	.01	.01	.20- .20	.20- .20
	Intro. to Bus.	.14	.14	.84-1.50	.89-1.50
	Marketing	.59	.65	.20-2.00	.20-2.00
	Sales	.10	.09	.16-1.00	.16- .90
	Work Experience	.02	.02	.40- .40	.40- .40
	I.B.M.	.03	.03	.50- .50	.50- .50
	Total	11.14	11.54		
Life Science	Biology, Zoology, Bacter. - Lect.	2.63	2.72	.70-8.56	.70-8.58
	Lab.	2.50	2.52	1.38-6.00	1.38-4.30
	Anatomy, Physiology - Lecture	.39	.40	.12-1.20	.12-1.20
	Lab.	.67	.69	.10-2.41	.10-2.41
	Botany, Nature-Lecture	.22	.23	.10-1.20	.10-1.20
	Lab.	.80	.83	.31-1.95	.31-1.95
	Total	7.21	7.33		
Physical Science	Physical Science Lecture	.69	.59	.50-2.30	.50-1.40
	Lab.	.11	.15	.27- .60	.27- .77
	Geology Lecture	1.02	1.07	.21-5.20	.25-4.10
	Lab.	.30	.20	.10-1.70	.10-1.70
	Astronomy	.21	.29	.20-1.50	.20-1.50
	Meteorology	.20	.20	.62-2.70	.62-2.70
	Chemistry - Lect.	2.57	2.58	.55-4.40	1.60-4.40
	Lab.	4.17	4.11	1.28-5.55	1.88-5.60
	Physics - Lecture	1.48	1.48	.40-2.70	.40-2.70
	Lab.	1.13	1.10	.40-3.50	.40-3.00
	Total	11.82	11.77		
Engr.	Strength of Mat.	.72	.70	.30-3.53	.20-3.10
	Stat.	.01	.01	.05- .05	.05- .05
	Engr. Drawing	2.52	2.53	.90-5.60	.70-5.60
	Surveying	.59	.53	.20-2.50	.20-2.50
	Lab.	.02	.02	.40- .40	.40- .40
	Total	3.86	3.79		

	Department Courses	1959	1970	1959 Range	1970 Range
Technical and Vocational, Industrial	Aero. Grd. School	.98	1.40	.43-8.17	.60-8.17
	" Lab	.17	.17	.80-2.10	.80-2.10
	Architectural Drafting	.51	.43	.20-3.59	.20-2.10
	Lab	.09	.10	1.50-1.50	1.70-1.70
	Agriculture - Lec.	.33	.31	.10-1.30	.10-1.30
	Lab	.34	.33	.80-1.94	.60-1.94
	Building Trades	.22	.19	.20-1.42	1.42-1.75
	Broadcast	.01	.01	.08- .08	.08-.08
	Cosmetology	.19	.19	3.20-3.20	3.20-3.20
	Industrial Math	.03	.03	.50- .50	.50- .50
	Electronics - Lec.	.81	1.13	.40-4.00	.40-6.60
	Lab	.97	1.25	.43-4.93	.80-4.93
	Industrial Science Lecture	.01	.01	.10- .10	.10- .10
	Lab	.07	.07	1.20-1.20	1.20-1.20
	Law Enforcement	.26	.36	.70-1.30	.80-1.50
	Technical Drafting	.19	.19	1.00-2.26	1.00-2.20
	Technical Math	.05	.05	.90- .90	.90- .90
	Petroleum	.08	.05	.90- .90	.70- .70
	Shops	1.67	1.08	1.30-15.0	.50-5.80
	Automotive	1.62	1.25	1.30-4.49	.81-4.49
	Machine	.34	.33	.33-1.40	.33-1.40
	Metals	.15	.14	.06-1.10	.24-1.00
	Welding	.12	.13	.01- .50	.01- .50
	Wood	.18	.18	.21-1.42	.21-1.42
	Shop Lecture	.07	.08	1.20-1.20	1.30-1.30
	Other	.25	.56	.08-2.45	.10-5.00
	Total	9.69	10.02		
Home Ec. & Nursing	Home Economics Lecture	.90	.92	.10-3.20	.10-4.80
	Lab	.43	.56	.16-1.69	.30-1.60
	Nursing, R.N. Lecture	.13	.18	.30-1.65	.30-1.85
	Lab	.02	.02	.30- .30	.30- .30
	L.V.N. Program Lecture	2.78	2.06	.50-11.2	.50-10.2
	Lab	.96	.76	.06-14.2	.60-8.70
	Dental Assistant	.29	.29	.51-2.28	1.00-2.28
	Nursery School	.01	.01	.10- .10	.10- .10
	Total	5.52	4.80	.78-28.6	.29-23.7

*Range: These figures show the high and low percentages of student hours per week for each course or department only in those schools offering these classes. Except for English, Mathematics, History, Foreign Language, etc. (common to all schools) the low figure for Range in most cases is 0.

TABLE II

E. Class size as indicated in Table II is the average enrollment of each class as it existed in the instructor's roll-book as of the first week of October, or in the case of classes with limited enrollment, the limit for the class as indicated in the registration instructions for that institution.

To keep the figures for the class size in true perspective, it was decided to separate the large lecture classes from the normal or traditional sized classes. The average class size in conventional classes in history might be about 35 or 40 students. Some schools have started using large lecture halls seating 100 to 300 students for lecture classes. If we were to group these two together we might find that the average was somewhere between 70 to 80 students which is unrealistic. Therefore an arbitrary separation was made at 72 (a common class size found in many science lecture classes), and separate averages determined for all classes below 72 students and another average for all large lecture classes in excess of 72. Many schools having laboratories with 24, 25 or 30 student stations in each laboratory section will group 3, 4 or 5 laboratory sections to one lecture section. Therefore the large lecture section is usually a small multiple of the laboratory sections.

TABLE II

Class Size. AVERAGE SIZE OF CLASSES IN EACH COURSE IN ALL SCHOOLS.

Class size as reported during the first week of October, or 'limited' enrollment in 'limited' classes.

	Department Courses	Mean Size	Large Lect. (if any)	Range
Liberal Arts	English	31	100	20- 100
	Drama-Speech	27	79	15- 79
	Foreign Language	32		25- 40
	Mathematics	34		25- 40
	Social Science			
	Anthropology	37	120	30- 140
	Economics	38		35- 40
	Geography	38		30- 50
	History	38	125	25- 150
	Humanities			
	Orientation	38		30- 45
	Philosophy	35		25- 50
	Political Sci.	40	150	35- 150
	Psychology	39	150	30- 150
	Sociology	43		
	Library Science	32		20- 45
	Total: Social Sci.		100-400	35- 400
	Total: "Academic"			
ART	Apprec., History, Theory	43	100	18- 100
	Drawing-Painting	25		18- 30
	Crafts	21		18- 25
	Photography			
	Lecture	23		20- 25
	Lab.	16		16- 16
Music	Lecture Hist., Theory, Appreciation	37	163	16- 300
	Choral	42	84	22- 100
	Instrumental Practice Grps.	49	100	30- 100
P.E.	Health Education	42		30- 65
	Hygiene	40	118	35- 150
	First Aid	34		30- 40
	Coaching	33		
	Journalism	22		
	Reading Lab.	25		

	Department Courses	Mean Size	Large Lect.	Range
Business	Acct., Bkkpg.	34		24- 40
	Typing, Shorthand	43		20- 45
	Off. Trng. (Mach.)	26		18- 36
	Business English	40		40- 40
	Law, Math., Etc.	37		32- 40
	Distrib. Education	31		25- 35
	Data Processing	33		25- 40
	Human Relations	40		
	Marketing	37		24- 37
	Sales	40		
	General Business	45		
Life Science	Biol., Zool., Bact.			
	Lecture	47	84	34- 100
	Lab.	28		24- 36
	Anatomy, Physiol.			
	Lecture	43	77	32- 100
	Lab.	27		24- 32
	Botany, Nature Stdy.,			
	Lecture	33	72	32- 72
	Lab.	27		24- 36
Physical Sci.	Physical Science			
	Lecture	86	86	72- 100
	Lab.	28		24- 30
	Geology - Lecture	49	49	36- 100
	Lab.	26		18- 32
	Astronomy	38	100	25- 100
	Meteorology	30		10- 50
	Chemistry - Lect.	36	86	28- 150
	Lab.	27		24- 32
	Physics - Lecture	43	83	30- 100
	Lab.	24		16- 30
Engnr.	Strength of Mat. Stat.	34	85	18- 100
	Engineering Drawing	28		20- 40
	Surveying - Lecture	27	75	16- 75
	Lab.	17		15- 18

	Department Courses	Mean Size	Large Lect.	Range
Technical & Industrial Vocational,	Navigation	32		32- 32
	Aero Grnd. School	29		29- 29
	Work Experience	35		35- 35
	Architectural Drafting (Lect.)	30	100	24- 100
	(Lab.)	25		24- 25
	Agriculture			
	Lecture	34		24- 50
	Lab.	25		20- 30
	Construction	30		30- 30
	Cosmotology	35		35- 35
	Broadcast	15		15- 15
	Electronics			
	Lecture	37	75	24- 100
	Lab.	25		16- 30
	Law Enforcement	34		24- 50
	Technical Drafting	30		30- 30
	Shops - Automotive	25		24- 35
	Carpentry	20		20- 20
	Machine	22		15- 30
	Metals	22		20- 25
	Welding	23		20- 30
	Refrig.	24		24- 24
	Wood	24		20- 29
	Mining	24		24- 24
	Plumbing	20		20- 20
Home Econ	Home Econ. - Lect.	30		24- 35
	Lab.	25		16- 35
Nursing	Nursing - R.N. Prog.	30		
	L.V.N. Program	26		15- 35
	Dental Assistant	41		25- 75
	Medical Assistant			

F. Rooms Required to House the Programs Indicated by the Normative Data

In Table III an attempt has been made to show how many rooms will be required for each of the courses or departments shown in Tables I and II.

Using the average percentage curriculum emphasis for 1970, (from Table I) and the average class size (as indicated by Table II) these figures for each course were then processed by the procedure found in Form D of the Space Adequacy Survey-College.

In rounding off the figures to whole numbers an attempt to combine classes that could use the same rooms was used as would normally be done in the administrative conferences required by the procedures of the Space Adequacy Survey-College.

Table III. # of rooms.

NUMBER OF ROOMS NEEDED TO HOUSE THE PROGRAM INDICATED BY USING NORMATIVE CURRICULUM EMPHASIS (FROM TABLE ONE) AND THE NORMAL CLASS SIZE (FROM TABLE TWO) AS PREDICTED BY USING FORM D OF THE SPACE ADEQUACY SURVEY-COLLEGE.

DEPARTMENT OR COURSE	PERCENTAGE OF CURRICULUM	STUDENT HOURS PER WEEK	CLASS SIZE (LARGE LECTURE) IF ANY (IN PARENTHESIS)	CLASS GROUPS PER WEEK	COMPUTED TEACHING SPACE NEEDS	ADJUSTED TEACHING SPACES
ENGLISH	11.24	7112	31	229	8.19	8
DRAMA-SPEECH	2.09	1328	27 (LL 79)	49.1	1.75	2 (1 LITTLE THEAT
FOREIGN LANGUAGE	3.51	2214	32	69.1	2.96	3
MATHEMATICS	7.79	4920	34	144.8	5.16	5
SOCIAL SCIENCE	3.58	2279	38	59.7	2.13	3
ANTHROPOLOGY	.75	474	37 (120)	12.8	.46	
ECONOMICS	.61	385	38	10.4	.37	2
GEOGRAPHY	.46	290	38	7.63	.27	
HISTORY	3.78	2385	38 (125)	62.8	2.24	3
HUMANITIES	.06	37.9	50	.76	.027	
ORIENTATION	1.00	631.8	38	16.6	.59	2
POLITICAL SCI.	.83	525	40 (150)	13.2	.47	1 LL
PSYCHOLOGY	2.73	1724	39 (150)	44.3	1.58	2
SOCIOLOGY	.74	467	43	10.85	.39	
TOTAL SOCIAL SCIENCES	15.37		(138			28 + 1 LT 1 LL
ART (LECTURE)	1.42	897	43 (100)	20.9	.75	1
" DRAW., PAINT.	2.31	1465	25	58.6	2.39	3
" CRAFTS	.32	202	21	9.6	.39	1
PHOTO LECTURE	.10	63.1	23	2.7	.09	
" LAB.	.39	24.6	16	1.5	.06	1
LIFE SCIENCE BIOLOGY, ZOOLOGY BACTERIOLOGY, ETC.						
LECTURE	2.72	1720	47 (84)	36.5	1.31	1 LL
LABORATORY	2.52	1590	28	56.8	2.32	2
ANATOMY, PHYSIOLOGY						
LECTURE	.40	253	43 (77)	5.9	.21	-
LABORATORY	.63	398	27	14.7	.60	1
BOTANY, NATURE STUDY - LECTURE	.23	145	33 (72)	4.4	.16	-
LABORATORY	.83	524	27	19.3	.79	1
PHYSICAL SCIENCE LEC	.59	372	86 (86)	4.5	.16	-
LABORATORY	.15	95	28	3.4	.14	-
GEOLOGY - LECTURE	1.07	676	49	13.7	.49	1
" LAB.	.20	126	26	4.9	.17	-
ASTRONOMY	.29	183	38 (100)	4.8	.17	PLANATARIUM
METEOROLOGY	.20	126	30	4.2	.15	-
CHEMISTRY - LECT.	2.58	1630	36 (86)	45.2	1.62	1 - 1LL
LABORATORY	4.11	2600	27	96.2	3.92	4
PHYSICS - LECT.	1.48	925	43 (83)	21.5	.77	1
LABORATORY	1.10	695	24	28.9	1.18	2
ENGINEERING						
LECTURE	.70	443	34 (85)	13.0	.46	1 LL
DRAWING	2.53	1599	28	57.0	2.32	3
SURVEYING	.55	347	27 (75)	12.7	.52	1
MUSIC - LECTURE	1.21	765	37 (163)	20.6	.74	1 LL
CHORAL	.77	486	42 (84)	11.6	.47	
INSTRUMENTAL	.60	378	49 100	7.6	.31	1
HEALTH EDUCATION	1.12	709	42	16.9	.60	1 LL
HYGIENE	.79	499	40 (118)	12.5	.45	
FIRST AID	.28	177	34	5.2	.18	
COACHING	.60	380	33	11.52	.41	1

TABLE III CONTINUED

DEPARTMENT OR COURSE	PERCENTAGE OF CURRICULUM	STUDENT HOURS PER WEEK	CLASS SIZE (LARGE LECTURE) IF ANY (IN PARENTHESIS	CLASS GROUPS PER WEEK	COMPUTED TEACHING SPACE NEEDS	ADJUSTED TEACHING SPACES
BUSINESS						
GENERAL BUSINESS	.14	89	45	1.98	.07	-
ACCTG., BKKPG.	2.43	1533	34	45.20	1.62	2
TYPING-SHORTHAND	4.02	2569	43	59.80	2.14	3
OFF. TRNG. (MACH.)	1.68	1062	26	40.90	1.46	2
BUS. ENGLISH	.13	82	40	2.05	.07	-
BUS. LAW - MATH. -ETC.	1.81	1142	37	30.85	1.12	1
DISTRIBUTIVE EDUCATION	.15	95	31	3.07	.11	
DATA PROCESSING	.22	139	33	4.22	.15	
HUMAN RELATIONS	.01	63	40	1.58	.05	1
MARKETING	.65	410	37	11.09	.39	
SALES	.09	57	40	1.42	.05	
AERO GRD. SCHOOL	1.40	886	29	30.55	1.09	1
" " " LAB.	.17	107	29	3.69	.15	
ARCHITECTURAL DRAFTING	.53	334	30	11.08	.49	1
AGRICULTURE - LECT.	.31	196	34	5.78	.23	
" LABORATORY	.33	208	25	8.32	.39	
BUILDING TRADES	.19	120	24	5.00	.21	
COSMETOLOGY	.19	120	35	3.42	.14	1
ELECTRONICS - LECT.	1.13	715	37	19.30	.69	1
" LABORATORY	1.25	790	25	31.55	1.31	2
LAW ENFORCEMENT	.36	227	34	6.69	.24	1
SHOPS						
GENERAL	1.08	682	24	28.40	1.18	2
AUTO	1.25	715	25	28.60	1.19	1
MACHINE	.39	208	22	9.45	.39	1
WELDING	.13	82	23	3.56	.15	
WOOD	.18	113	24	4.71	.19	
OTHER (PETROLEUM, MINING BROADCAST, ETC.	1.19	753	24	31.30	1.32	2
HOME ECONOMICS						
LECTURE	.92	581	30	19.4	.69	1
LABORATORY	.56	354	25	14.2	.59	1
R.N. NURSING						
LECTURE	.18	112	30	3.7	.13	-
LABORATORY	.02	13	26	.5	.02	-
LVN NURSING						
LECTURE	2.06	1300	26	50.0	1.79	2
LABORATORY	.76	480	26	18.4	.77	1
DENTAL ASSISTANT	.29	183	41	4.4	.16	1
READING LABORATORY						1
JOURNALISM						1

TOTAL	88
GENERAL	42
LARGE LECTURE	7
SPECIAL	22
LABORATORIES	17

THE NUMBER OF ROOMS NEEDED TO HOUSE THE PROGRAM INDICATED BY NOMATIVE CURRICULUM EMPHASIS (FROM TABLE I) AND THE NOMATIVE CLASS SIZE (FROM TABLE II) AS PREDICTED BY USING FORM D OF THE SPACE ADEQUACY SURVEY-COLLEGE.

G. The Normative Junior College

The number of rooms required to house the normative junior college is shown in Table IV. These figures were derived by averaging the summaries for each school found in Chapter III. The number of rooms indicated as the average for all the schools studied is meaningful only if it is remembered that these figures apply to the average school or one having the average curriculum emphasis and average enrollment. Where special vocational, or trade and industrial classes are typical for a particular school, or where highly specialized programs exist, such as aircraft mechanics, then separate facilities will usually be found for these classes. Multiple use of such facilities is seldom found nor is it generally desireable. Obviously, this will increase costs and lower utilization of the plant. Yet the educational philosophy of the college which encourages such specialized courses, to meet community needs, will usually justify the additional expense involved. Students in these special programs also attend some elective courses and required liberal arts classes, thereby increasing the total ADA.

Table III differs from Table IV because of the methods used to arrive at the total rooms required. Table III is the result of applying the standard procedures of the Space Adequacy Survey-College to the normative data for curriculum emphasis and class size (from Tables I and II). Table IV is the arithmetic mean of the totals on each of the summary sheets from the 17 schools studied.

In arriving at the adjusted teaching spaces for Column 7 of Table III it was the writer's judgement that it would be better to use 6 large lecture halls and one little theatre, rather than only the four (including one little theatre) as found in Table IV. This reduced the total number of rooms needed from 94 to 88 and the general classrooms needed from 49 to 42.

TABLE IV

THE NORMATIVE JUNIOR COLLEGE

Normative data for all schools showing average enrollment, student hours per week and the number of rooms needed to house the normative curriculum as determined by numerically averaging the summaries from 17 California Junior Colleges.

1. Enrollment (full time) 1959-60.....1548
2. Enrollment (full time) 1969-70.....3012 (estimated)
3. Average daily attendance (incl. Adults).....2850 (1959-60)
4. Student hours per week.....32,406 (1959-60)
5. Student hours per week.....63,180 (1970 est.)

Total rooms needed	93.5 rooms
Divided as follows:	
Standard classrooms	48.3
Large Lecture Halls	4.0
Spec. Classrms, Shops	22.0
Laboratories	19.2

2. OBSERVABLE TRENDS

A. In Class Size

A close look at Table II, page 50 will reveal that the most significant change for the future is the increased use of large lecture halls for classes in the social sciences. In classes such as Anthropology, History, Political Science and Psychology we find plans to use rooms seating 100 to 400 students. In one or two of the schools the plan is to have 2 lectures per week in large lecture halls and to have the third hour each week devoted to the same class divided into small quiz and discussion groups. Three schools are currently using large lecture halls for social sciences but only one of these divides the class into smaller groups on a scheduled basis. One school has a large lecture class in English Literature.

The planned use of large lecture halls for science classes is not new. Most schools combine a multiple of the laboratory sections to form each lecture class. The few schools still using the lab-lecture combined section plan to shift to the use of separate large lecture sections for the future.

The use of the large lecture hall for Music Appreciation, Hygiene, and some technical courses appears to be a new trend in junior colleges.

"Class size" for the balance of the curriculum shows no marked differences from current and past practices in junior colleges of California.

B. Curriculum Emphasis

The average percentage of student hours per week for each subject (as shown in Table I, page 48) expressed as a percentage of the total program, indicated the extent of emphasis of that particular course in the entire curriculum.

It is significant to note that no major changes in a junior college curriculum are indicated for the future. At some schools, as indicated in Chapter III, no changes were anticipated or there was no desire to hazard a prediction of changes in curriculum.

If we look at the division or departmental totals of Table I we find the greatest increase is anticipated in the area of Business courses which are expected to change from 11.14% to 11.54% of the total curriculum. The next highest rise in emphasis is indicated in the area of Vocational, Trade and Industrial Training which is expected to change from 9.69% to 10.02%.

Individual courses which show significant increases for the future are Foreign Languages (3.23 to 3.51), Accounting and Bookkeeping (2.26 to 2.43), Office Training and Machines (1.54 to 1.68), Biology, Bacteriology and Zoology (2.63 to 2.72), Aeronautics Ground School (.98 to 1.40), Electronics lectures (.81 to 1.13) and Electronics Lab (.97 to 1.25), Law Enforcement (.26 to .36) and R.N. Nursing Lecture (.13 to .18).

Because these figures are percentages, the total must still be 100%, regardless of the anticipated growth of the institutions.

Therefore we will find declines indicated for some departments and courses despite an anticipated increase in total enrollment. For example if the anticipated enrollment of a school is expected to be doubled, yet the total student hours per week in any one course is not quite doubled, then the percentage curriculum emphasis for that course will show a decline.

The divisions or departments that indicate slight declines for the future are Art (4.17 to 4.11), Physical Education (2.82 to 11.77) Engineering (3.86 to 3.79) and the LVN Nursing courses (3.74 to 2.82). The LVN nursing program shows a decline because the State requirements for the license now specifies fewer student hours for completion. The R.N. Nursing program for junior colleges has been changed from a three year program to a two year program but shows a slight increase due to the fact that several schools which had no R.N. program in the past plan to add one in the future.

Individual courses that show significant declines in student hours per week (expressed as a percentage of the total) are Mathematics (7.79 to 7.34), Physical Science (.63 to .59), Surveying (.59 to .53), Architectural Drafting (.51 to .43) and Automotive Shops (1.62 to 1.25).

In light of these figures one may speculate that perhaps the emphasis for the future will be slightly more on the terminal, vocational, trade and industrial classes and on the business training classes, and somewhat less on the transfer programs. This does not mean there will be fewer students in these programs

but that they will develop a smaller percentage of student hours per week. The planned growth of the State College System and the addition of several new campuses for the University of California may have been factors in influencing the results obtained.

C. Size of Plant

Although the junior colleges included in the study show an anticipated growth from 1548 to 3012 for full time students, there was no individual school that planned to go beyond the 4000 mark on any one campus. Most schools facing markedly increased enrollments plan to add additional campus facilities to handle the anticipated growth.

The trend toward specialization in the vocational fields calls for more shop facilities. The trend toward the use of large lecture halls shows there will be at least four to six of these at the average junior college.

The total plant for an enrollment of 3012 full time students will have 93.5 rooms divided into 48.3 general classrooms, 4 large lecture halls, 22 special classrooms and shops and 19.2 laboratories, as determined by averaging the summary sheets for each of the seventeen schools in the study.

APPENDIX

Actual samples of Forms A,B,C,and D of the Space Adequacy Survey- College as used in the conduct of the study.

Ventura College

Business Department

Sub-Dept. or Subject

Form A - Space Adequacy Survey
College - Sheet No. 4

Student-Hour Enrollment

(Use at least one line for each Instructor
Separate Line for Lab Courses
Separate sheet for each Sub-Dept. or Subject)

April 14, 1960 Date

Prepared by Patterson and Portugal

1	2	3									4	5	6	7
Instructor (name)	Course (name)	Enrollments by hour & days per week*									Total Enrol. Col.3	Number Classes	Average Size (4 ÷ 5)	Student Hours Week**
		1 8:00	2 9:00	3 10:00	4 11:00	5 12:00	6 1:00	7 2:00	8 3:00	9 4:00				
Morris	Account. Prin.(Lec) 1A		37-3								37	1	37	111
"	" " (Lab) 1A	26-2	26-2				11-2	11-2			74	4	19	148
Griggs	Applied Accounting 3A	26-5									26	1	26	130
Morris	" " 3A				23-5						23	1	23	115
Morris	Mathematics 6			34-3							34	1	34	102
Henrie	Calculating Machines 7				24-3						24	1	24	72
Crowe	" " 7						28-3				28	1	28	84
Crowe	English Corresp. 10			19-3							19	1	19	57
Miller	Typing 11A	10-5	18-5								28	2	14	140
Griggs	Typing 11A						19-5				19	1	19	95
Griggs	Inter. Typing 12A				34-5			37-5			71	2	36	355
Crowe	Office Practice 15A	25-2	25-2				12-2	12-2			74	4	19	148
Prescott	Shorthand 20A	25-5					16-5				41	2	21	205
Miller	" 20A							10-5			10	1	1	50
Prescott	" 21A		28-5								28	1	28	140
Prescott	Dictation 22A				11-5						11	1	11	55
Crowe	Office Practice 25A			11-2	11-2						22	2	11	44
Crowe	" " 25B			2-2	2-2						4	2	2	8
Crowe	" " 25C			5-2	5-2						10	2	5	20
Total Hour Enrollments		407	443	195	448		305	281						2079

(These totals should be transferred to Form B)

* Number of days class meets per week shown after dash line.

** Enrollment for class multiplied by number of hours class meets per week.

Valley College

Summary Sheet by Depts.
Page 1 of 3

Form B - Space Adequacy Survey
9/21/59 Date

53,225
Grand Total Student Hours per Week-Col. 7, Form A

Prepared by A.W. Calvert
E.J.Portugal

1	2									3	4	5	6
Department: Course	Enrollment by Departments (Column 3, Form A)									Student Hrs. per Week	% Col. 3 is of Item 1	Col. 4 Percentages - adjusted by conference	Computed Student Hours per Week (Col.5 x Item 1
	1 8:00	2 9:00	3 10	4 11	5 12	6 1	7 2	8 3	9 4				
ENGLISH													
English	455	1128	1096	861	853	821	549			5763	10.82	10.17	5413
Library Science			8							8	.01	.01	8
Journalism	14	12	6	129	52		46	10	10	279	.52	.52	279
Reading Lab.	56				32	46	16			150	.28	.28	150
FOREIGN LANG.													
Drama - Speech	104	348	334	282	91	428	212			1799	3.37	3.70	1969
Education	40	115								155	.29	.29	155
Foreign Lang.	640	501	855		715	490				3201	6.01	5.78	3076
Statistics				30						30	.05	.05	30
Mathematics	1026	1069	977	288	1416	661	545			5982	11.23	9.23	4913
SOCIAL SCIENCES:													
Psychology	747	893	877	361	590	444	168			4080	7.66	7.39	3933
Economics		207	69	114	135		60			585	1.09	1.09	585
Geography	123	177		120	129					549	1.03	1.11	591
History & Anthrop	735	978	1401	807	1044	722	414			6101	11.46	10.54	5610
Philosophy	108	120	231		105	134	81			779	1.46	1.39	740
Political Sci.	70	160	64		60	123				477	.89	.89	477
Sociology	114	249	132	219	123		99			936	1.75	1.61	857
ART													
Appreciation, Hist, Theory	260	324	304	86	472	58				1504	2.82	2.58	1373
Crafts	26				30					56	.10	.10	56
MUSIC													
Hist., Theory, Appreciation (Lecture Groups)	108	369	78	72	94	78				799	1.50	1.38	735
Choral			3 50			240				590	1.10	1.10	590
Instrumental (Practice Groups)			57		174	54	111			396	.74	.74	396

B

PERCENTAGE COMPARISONS - JUNIOR COLLEGE PROGRAMS

State Department of Education
Bureau of School Planning - 1958

Form C - Space Adequacy Survey

	Junior College	"A"		"B"		"C"		"D"		"E"		"F"	
	Student Hrs. per week	39,962		23,394		7,291		5,491		39,381		6,414	
		Actual	Adj.	Actual	Adj.	Actual	Adj.	Actual	Adj.	Actual	Adj.	Actual	Adj.
ACADEMIC	English	4.0		9.7		11.3	8.4	9.3	6.3	13.7		12.3	11.8
	Reading Tech	1.7		.5		.8	.8	--	1.0	--		--	.5
	Journalism Lab.	.6		.2		.7	.7	1.9	.7	.4		.7	.7
	Drama & Speech	2.2		2.0		2.8	2.1	1.2	2.0	1.5		1.4	2.0
	Foreign Lang.	4.0		4.2		2.9	4.0	2.3	4.0	2.8		3.1	3.0
	Mathematics	6.4		9.7		13.7	11.0	3.7	9.0	10.0		8.1	8.0
	Social Science	22.2		16.7		15.9	16.0	13.1	17.0	14.4		20.7	17.3
	Orientation	--		--		--	--	6.7	--	4.5		1.1	1.1
	Subtotal	41.1		43.0		48.1	43.0	38.2	40.0	47.3		47.4	44.4
ART	Appreciation, Theory	.7		.7		--	.5	1.5	.7	.4		1.0	1.0
	Draw., Paint., & Crafts	1.7		2.5		1.3	1.5	5.6	2.3	2.1		1.9	1.2
	Subtotal	2.4		3.2		1.3	2.0	7.1	3.0	2.5		2.9	2.2
MUSIC	Hist., Theory, Appr.	.8		1.9		.7	.7	.6	1.0	.9		1.4	1.4
	Choral & Instrumental	1.5		.6		1.5	1.5	.6	1.0	1.9		.5	1.2
	Subtotal	2.3		2.5		2.2	2.2	1.2	2.0	2.8		1.9	2.6
BUSINESS	Acct., Bookkeeping	1.1		2.0		2.3	2.6	2.6	2.6	2.4		2.7	2.5
	Typing	2.1		3.0		2.1	2.5	1.7	2.0	1.9		1.1/	2.0
	Of. Trng. (Mach.)	.8		2.6		1.1	1.4	3.2	1.7	1.6		1.7	1.0
	Law, Math., etc.	4.3		.9		1.6	1.7	1.9	1.9	2.3		1.9	1.4
	Distrib. Educ., Marketing	1.8		.2		--	1.5	1.1	1.1	--		1.2	1.0
	Shorthand	1.3		2.3		1.2	1.2	3.6	1.7	1.4		.5	1.2
	Subtotal	11.4		11.0		8.3	10.9	14.1	11.0	9.6		9.1	9.1
HOME EC.	Lecture	1.0		.7		--	.5	1.3	1.0	--		.2	.6
	Lab.	.7		1.3		--	1.0	3.5	1.5	.5		.2	.2
	Subtotal	1.7		2.0		--	1.5	4.8	2.5	.5		.4	.8

Mt. San Antonio College

1. Predicted Enrollment* 7000 1975 (date)
2. Present Enrollment* 2800
3. Predicted Increase 4200
4. Working Factor (Line 1 ÷ Line 2) 2.5
5. Hours Available/wk. for Scheduling** 3.5

Teaching Space Needs

Form D - Space Adequacy Survey
College

October 1959 date

Prepared by A. W. Calvert

1 Department: Course	2 Computed Student Hrs.per Wk. Col.6,Form B	3 Average Class Size (College Policy)	4 Class Groups per Week Col. 2 ÷ Col. 3	5 Class Groups per Week for Predicted En. Col.4xItem 4	6 % Space Utilization (College Policy)	7 Computed Teaching Space Needs: Col.5 ÷ (Item 5xCol.6)	8 Teaching Space Needs Adjusted by Conference	9 Adequate Teaching Spaces Available	10 Additional Teaching Spaces Required
ACADEMIC									
English	3240	35	92.6	231.5	80	8.26	8	3	5
Reading Tech	36	35	1.0	2.5	80	.08	1	1	0
Journalism Lab.	154	35	4.4	11.0	80	.39	1	1	0
Drama	1098	32	34.3	85.8	80	3.06	4	2	2
Foreign Lang.	2216	40	55.4	138.5	80	4.94	5	4	1
Mathematics	2895	35	82.7	206.8	80	7.38	8	7	1
Social Science	11914	50	238.3	595.8	80	21.27	22	12	10
Police Science							2	0	2
Orientation									
ART									
Appreciation, Theory	583	50	11.7	29.3	80	1.04	1	1	0
Draw, Paint	1113	20	55.6	139	80	4.96	5	5	0
Photo	30	20	1.5	3.8	80	.13	See Journalism		
MUSIC									
Hist.,Theory, Appreciation	705	40	17.6	44	80	1.57	2	2	0
Choral	389	100	3.9	9.8	80	.35	1	1	0
Instrumental	390	30	13.	33	80	1.17	1	1	0

* Day Students taking 12 or more units.
** Clock hours from start to finish of scheduling day - less 1.