A COMMUNITY JUNIOR COLLEGE
FOR PANAMA CITY, FLORIDA

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ABSTRACT

Title: A Community Junior College for Panama City, Florida

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Social, economic, and population changes have occurred in our society which have made the development of the public junior college imperative. There is a great demand for post high school education at the local level which at present is lacking in many areas.

The community junior college has three basic activities in its program: (1) university parallel education, (2) vocational and terminal education, and (3) adult education. The success of a junior college depends on the fact that it supplies extensive guidance and counseling service to its students, that it has strong leadership, is well supported financially, and has a well-defined place in the state educational system. Only then can it fulfill the community needs for various types of training and supply quality education as well as quantity education.

The Gulf Coast Community College is to be located in Panama City, Florida and will serve 350 students at the
end of the first building program. It eventually will have 750 students, all of which will be commuters. It will develop a full university parallel program while the technical and vocational program will grow as the community needs are more clearly defined. The adult program will grow with the other two programs.

The site is 80 acres of land located on the western edge of Panama City looking north to two large bodies of water much used by the city for recreation.

The climate, expansion of the facilities, and the expression of a community college are major factors in the solution of this school.

The climate dictated an architectural solution which takes advantage of shading and breezes as much as possible. It also determined the orientation to a great extent. In expanding the college a system of organization must be developed which creates a basic spatial organization and yet allows expansion to occur without impairing the clarity of the organization. To state the idea of the community college, this organization must be one which expresses the interdependence of one individual to another and to the group as a whole.
Cambridge, Massachusetts

July 24, 1959

Pietro Belluschi, Dean
School of Architecture and Planning
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Dean Belluschi:

I hereby submit this thesis, entitled "A Community Junior College for Panama City, Florida," in partial fulfillment of the requirements for the degree of Master of Architecture.

Very truly yours,

//John Oliver Cotton
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DESIGN PROPOSAL

To design a community junior college in Panama City, Florida, to serve the residents of Bay and Gulf Counties.

DESIGN OBJECTIVES

To create the atmosphere that characterizes the philosophy behind the community junior college and its attitude and relationship to the community and to education.

To create a clarity of expression in the architecture which is in keeping with the functions of the institution.

To create a system of circulation in which the pedestrian and vehicle are kept separate and which allows for the freedom of the individual to more fully partake of the institution.

To create a system of structure and mechanics which recognizes the site and climate and which can be expanded easily.

To create a system of spatial organization which allows for expansion of the school in whole or in part and which, through its organization, stimulates the students' development as individuals and as a group.
THE NEED FOR COMMUNITY JUNIOR COLLEGES

The United States has been the location of a great experiment in education. This experiment, which provided an opportunity for public education for all people during the 1800's in the elementary schools, and for all people during the late 1800's and early 1900's in the high schools, now needs to provide opportunity for public education for all people in the post high school years.

Because of the changing nature of our society and because of the basic aims of the community junior college, this is the institution which can fulfill an ever-widening gap in our educational system. There are several reasons why this seems to be so.

As a democratic nation we have formulated certain basic assumptions which our whole approach to education is based on.

Basic Assumptions of Education

First - education is necessary for democratic government. Educated citizenry who can control their destiny in a
democratic manner have been a motivating force in the American system of education.

Second - education is valuable for the improvement in society. Many studies have shown that high educational attainment and high levels of living go hand in hand.

Third - education is valuable because it helps to equalize opportunity for all people. This assumption does not imply that all people should have the same educational experiences, but rather that all should have opportunity for education which is adapted to their abilities and to their own needs.

Fourth - education to be truly democratic and to achieve the greatest success must be locally controlled and locally oriented.

The changing demands on education are basically a result of three major changes in our society.

Population Change

In the United States, the birth rate has gone from 16.9 babies born per thousand population up to 25 per thousand in recent years. In Florida there were 28,000 births in 1935 compared to 90,000 births in 1956. At the same time, there has been a quadrupling of the number of people over 65.
Another factor in population change is internal migration within the country. Of the 30 million people in 1951 who moved their homes, 5 million were moving from state to state. Florida's population growth of 5% per year has been in large part due to immigration of this type.

The President's Committee on Education Beyond High School in its "First Interim Report" states that within fifteen years at least twice and possibly three times as many young people will demand opportunity for higher education. Florida's increase will be even greater because of its rapidly increasing population. It has been estimated that from the 1955 college enrollment of 44,526, the college enrollment will increase to 132,000 in 1970. This does not take into account the other types of post high school education such as terminal, vocational, and adult education. An expected increase in seniors in high school can be predicted to double in ten years, with even more if immigration continues as it has in the past.

Economic Change

A reduction of the work week from 65 hours in 1880 to 40 hours in 1953 is an indication of how more goods are
produced now with less human time spent in production. It also illustrates the change in the use of human or animal power from 60% in 1850 to less than 2% in 1950, which re-emphasizes the need for more highly trained workers. People now holding jobs that will soon be taken over by automation will also be in need of new educational training.

The increasing number of new industrial plants in Florida will require more and more people trained at the technician's level. The Florida Industrial Commission shows that there has been a steady increase in employment in non-agricultural establishments in Florida. This increase may be interpreted to mean an increased need for trained people.

The President's Committee on Scientists and Engineers reconfirmed this when they stated in their report, "In order to adopt our system of higher education to the greater demands which will be made upon it, the development of community junior colleges should be encouraged and assisted.

"One of the major weaknesses of our technological manpower structure has been the scarcity of properly trained technicians. From the point of view of training manpower, the most significant long-term potential of the
community college will probably be their two year terminal courses which are growing in popularity. In the past we have, for the most part, filled this gap by on-the-job training of workers or by employing graduates of 4-year science and engineering schools. The former is not always satisfactory and the latter is wasteful. The community colleges now promise to provide a formal and popularly acceptable channel for fitting young men and women specifically for technical jobs."

Sociological Changes

There is a growing reduction in the strength of American community life. The fact that many young people leave their homes to attend college never to return has led many sociologists to believe that the institution of higher education has been the culprit in the "siphoning off" of potential leaders and active citizens from the community. Many of the problems of the community may be solved or substantially improved by increasing the understanding and training of the people who live there.

The second factor is the increased awareness of the value of higher education. In a study of high school seniors in Florida (1956) over 43% indicated that they were going to continue their education within one year, while 62%
planned to within five years. Over 1/4 of the students who made the highest grades indicated that they had no plans to continue their education beyond high school.

Another area in which the need for public post high school education is expressed is in the students themselves. Under our present system there are several barriers which present themselves to the student.

**The Geographic Barrier**

Examinations of the student bodies of many institutions show that the greatest share of students comes from the area immediately around it. Of community junior colleges more than 90% of their students come from an area within a 30 mile radius of the school.

**Financial Barrier**

College attendance is more dependent on family income than upon scholarship. As the family income increases a greater proportion of students are able to go to college. The junior college permits at least the first two years to be completed at less than half the cost of attending the senior institution located outside the commuting distance.
Motivation Barrier

A great many students do not go on for further education beyond high school because they do not see the advantages. A local junior college can provide the variety of programs that will reduce the barrier. With proper guidance programs these people can be directed toward the best program suited for them.

All of these factors and many others which could be mentioned have made life long educational opportunity at a local level desirable if not completely necessary. This need, punctuated by the rapidly increasing population, re-emphasized by technological changes, and further supported by other sociological changes, should make us all aware of the real need for the community junior college.
THE GROWTH OF PUBLIC EDUCATION IN THE U.S.

In its simplest terms, education is the preparation of the individual for life in society. It is the process by which the person is made adaptable to the environment in which he is thrown. The education of every human being, irrespective of whether he is a member of a savage tribe or a highly civilized society, is primarily concerned with self-maintenance, which involves the acquisition of food, shelter, and clothing, and the agencies, devices, and knowledge whereby these may be acquired.

Evolution of Public Education in America

In the South, education for the wealthy was a family matter; it was done by private tutors and private schools; it was a social accomplishment. For the paupers, it was an economic necessity: preparation for apprenticeship. In the middle colonies, New York, Pennsylvania, Maryland, Delaware, and New Jersey, early education was left entirely in the hands of the various religious denominations. Many of these schools were opened by non-English settlers.
Of the middle states, New York was the first to acknowledge its obligation toward the spread of education, when, in 1784, a Board of Regents was created to oversee and regulate secondary and higher education. In 1795 definite steps were taken to stimulate the development of common schools by an annual state subsidy of $100,000 for a period of five years.

Education in New England was intended primarily as a religious tool—to facilitate reading and understanding of the Bible. The General Court of the Massachusetts Bay Colony in 1647 decreed that every town of fifty families should have an elementary school in which children might learn to read and write and acquire the fundamentals of religion. Schools thus established were schools of the Puritan faith. Support of schools by taxation was accepted throughout most of New England early in the 18th century. In 1827 Massachusetts passed a law providing instruction in all grades of public schools free of tuition charges.

**Federal Land Grants**

In 1785 Federal aid for public education had its genesis in an ordinance covering a survey of the Northwest Territory, which provided a Federal land grant for schools.
In 1803 Federal aid became a settled policy, for with the admission of the territory of Ohio as a state every township was granted the 16th section for the development and support of the common schools. This induced states to set up public school systems. The most responsive were states settled by New Englanders. Mississippi and some other states were notoriously slow.

The Rate Bill System

Aside from a few exceptions in New England, most state laws merely provided for the establishment and control of schools under public auspices. The full cost of instruction was not provided by public authority. The deficit was apportioned among parents of the pupils on a per diem basis, and collected by the local government in the same manner as ordinary taxes. This practice was known as the rate bill system. To provide education for the poor, who couldn't afford such assessments, the custom arose to admit these free. Laws in many of the states provided that this expense would be borned by those who could afford to pay. This naturally caused hard feelings; the parents in better circumstances objected to supporting children other than their own offspring, while the poor parents preferred independence for themselves and their children rather than being
beneficiaries of charity. There were no compulsory attendance laws, so that the result was that only the better off received elementary education for their children. The rate bill system failed to secure widespread public education, but was generally adhered to throughout the early decades of the nineteenth century. Pennsylvania established a free public school system in 1834, and New Jersey in 1838. With the exception of North Carolina, little progress was made in the South until after the Civil War.

**School Districts**

Administrative policies as to public education in the U. S. are traditionally local. The school district system first appeared in Massachusetts late in the 18th century. These districts were independent units with complete autonomy in educational matters. The school district system was peculiarly adapted to the frontier type of settlement where, without a comprehensive state system of education, it was expedient to permit groups of citizens to organize local schools for their own good.

**The Rise of Public School Systems in American Cities**

Philanthropic agencies supplied early education for the children of the working class in American cities of the
late 18th and early 19th centuries. Free schools for the poor were provided for by these agencies in the Eastern Seaboard cities where large numbers of poor immigrants had congregated.

In New York, the Free School Society, founded in 1805 evolved into a public agent of the city from a philanthropic group. In 1842 a city system of public schools was established, paralleling the Public School Society (evolved from Free School Society). In 1852 the latter was discarded in favor of the city established system.

Cities often made more progress toward free public education than the states in which they were located. To enable unified city school systems, charters were obtained from the state legislatures; later laws were enacted making each incorporated city, town or borough a single school district. Unified control was accomplished by the city or town superintendent of schools. By 1885 this office was almost universally found in urban communities.

The Graded School

The grade school, wherein children are divided into fairly homogeneous groups according to age and mental development, and instruction given accordingly, seems
such a logical development that one may well be surprised at its retarded growth.

First classification was horizontal rather than vertical. Boston in 1789 maintained a Latin school for boys only, and separate reading and writing schools at schools for boys only, and separate reading and writing schools at which both boys and girls were received. Public primary schools were introduced in 1820, with each school being divided into four classes and under the instruction of one woman teacher. In time the reading and writing schools, considered together, came to be called grammar schools, and differentiation of progress was recognized by recitation. The Quincy Grammar School was the next step, where the principal or one of a number of assistants each had charge of a single classroom. This system with its facility to classify students by age and attainment became conventionalized throughout the U. S. It is interesting that the most compelling local argument in favor of grading was the economic one: women, who could be paid less, could be used for instruction of younger and less advanced children, instead of men.

The Upward Extension of the School System

The introduction of the grading system coincided with and facilitated the development of secondary education.
In New England the Latin schools, primarily designed to fit young men for college and the ministry, gradually gave way to the private academy which, open to both sexes, afforded a broader curriculum. This was middle 19th century. Tuition limited these to classes of better economic conditions. Gradually state laws were enacted which required the maintaining of high schools. In 1853 the Union Free School Act in New York State provided for the establishment of free graded schools up to and including high schools. Toward the close of the 19th century, school grading seemed to settle in an eight year elementary and a four year high school organization. Prior to that the organization had been somewhat loose, with from six to eight years of elementary and from two to five years of high school. The system lacked standardization. During the present century the trend has been to shorten both elementary and high school and insert an intermediate school forming the 6-3-3 system.

The movement toward free education has continued into the college level. Federal land grants for state supported schools was the stimulus here. This movement is now being extended through the establishment of community junior colleges. Locally controlled, locally financed, and locally oriented, they are the latest development in the general trend of providing life long public education.
THE GROWTH OF JUNIOR COLLEGES IN THE U.S.

The junior college was first conceived in the New England area. They were established in the nature of finishing schools and were mainly concerned with providing a liberal arts background for preparing young ladies of well-to-do families to enter society. As time went on, these schools broadened their scope to provide professional-type training. In other parts of the country these schools had a more general program, but in New England a great majority still continue much in the same nature as they were established.

The public junior college as it is dealt with here is only about half a century old. It is an American development, not having been developed in other countries until rather recently. The first community junior college was established in the high school in Joliet, Illinois in 1902.

In 1919 there were 74 such institutions in the U.S. enrolling some 2,000 students. In 1956 there were 635 junior colleges enrolling 765,000 students. The greatest growth has been in the locally controlled public junior
college. In 1957 there were more than 360 public junior colleges enrolling 89% of the total number of students attending this kind of institution.

Looking at junior colleges with regard to the total number of institutions of higher education and total number of students enrolled in these institutions, we discover some interesting facts.

Of the 1,886 institutions listed in the Educational Directory in 1956-57, 525, or almost 3/10 of the total are listed as two year colleges. This does not include 60 institutions which offer the same scope of program as two year colleges that are operated as off-campus units of four year colleges and universities. The two year institutions in the nation enroll approximately 1/8 of all degree-credit students in higher education.
There are three basic types of education which the community junior college provides. These are university parallel courses, vocational and terminal courses, and adult education courses.

**University Parallel Education**

The college provides programs of study which parallel the first two years of a four year degree program. This work provides, on the local level, education of equal grade and quality to that provided in the four year degree granting institutions.

**Terminal Education**

This program is for those who do not plan to complete a four year degree program. This program includes general education, semi-professional education, and vocational-technical competence for those areas of occupations which require two years or less of training beyond high school. This program serves young people who otherwise attempt programs in four year institutions unsuited to
their abilities or interests. For students who later change their objectives, at least part of this work is often transferable to a four year institution.

**Adult Education**

This area of study includes credit and non-credit courses, frequently offered in the evening. The college often is a community center for many cultural activities, and provides opportunities for that segment of the population which has passed the normal age for high school attendance to continue to study and to learn.

**Guidance and Counseling Service**

One of the most important activities of a community junior college is its guidance and counseling services. Because of the nature of the school, with its broad program of studies, there will be a great variety of students who desire to attend. The school, because of its community orientation, is obligated to accept them and to guide them into the area which best fits their needs, desires, and abilities. The students will need help in personal development, planning careers, planning their education, etc. In all community junior colleges there is this real need for regular professional counseling services.
There are several observations regarding these services that are significant at this point.

First, in four year institutions the demand for counseling is particularly heavy in the first two years. The junior college can expect three to four times as heavy a demand for counseling services from its students in respect to the demand that the total university student body puts on its counseling service.

Second, assuming a ten month year and the heavier demand by freshmen and sophomores for counseling, the maximum load for a full time counselor is one counselor for every two hundred students. It is desirable that the counselors should be participating in faculty and student-faculty activities and not separated from the activity of the institution. If he teaches any classes, this number would have to be reduced.

Third, the guidance and counseling service should help students develop their potentialities in order to become more productive individuals. When 60% or more of all freshmen indicate intent to finish four years of college and 30% or less do, it is apparent that individuals need help in facing their own capabilities.
Effect on University Programs

The community junior college enables universities to concentrate their efforts more upon areas where they alone may serve. Freshman and sophomore groups at the universities would be made up of students who have a greater interest and ability to pursue a degree program. At the same time, the number of freshmen and sophomores in universities would not decrease, due to rising enrollments, but a greater portion of the university students would be made up of juniors, seniors, and graduate students. This would allow for more concentration of the staff and facilities in the areas where they would be doing the most good.
THE NATURE OF COMMUNITY JUNIOR COLLEGES

A community junior college is located in a geographically identifiable area and therefore serves specific community needs. They will differ therefore from community to community according to the local need. The community junior college should serve a variety of student needs and well as community needs. The following implications arise from this service to broad interests.

The community junior college is flexible. Its educational offerings recognize peculiarities of given localities. Its program is designed to meet those needs as well as the universal needs of students at this level. Its flexibility means also that it can work with a great variety of students in developing sufficiently to meet their academic requirements and to solve their own individual problems.

The community junior college offers a broad curriculum. The junior college cannot gear itself to any single specific area. It must keep its curriculum very broad and provide student personnel services which will assist the student in the wise selection of his program. This
breadth of curriculum implies that the core of general education will be the same from one institution to the other, but at the same time it will have special emphasis in some areas due to the locale.

The spectre of lower standards in the community college from those existing during the first two years of a four year institution is an ever-present threat to one of the functions of the community junior college. It is not always recognized that academic standards do not apply to all the offerings in a junior college or that academic standards depend a great deal on the guidance service in fitting the student to the program.

The community junior college helps each student develop his own potentialities. The junior college, in serving its broad interests, accepts some students who did not mature in high school as early as did others. If they can potentially profit from post high school education, then the school is obligated to provide (remedial) services which they need to improve themselves.

The community junior college provides a personalized educational atmosphere. The community junior college establishes a student-staff member relationship which provides the necessary personal kind of atmosphere that can help prevent the impersonal atmosphere that exists
in many large institutions. Because of the basic aims of the school the faculty is highly interested in the students as individuals. This does not detract from the soundness of the academic offering, but means that the faculty is aware of its role in the total development of the student.

A community college is related closely to the secondary schools and to the life of the community it serves. The junior college is in a good position to fill the gap between high school and college. The junior college curriculum can carry on from the offerings of the high school. The personnel services of the two are closely related. The counselors in the junior college are in a position to work very closely with counselors to achieve a better transition for the individual student.

The junior college also has to know the nature of the career opportunities in the community and it must know their needs. Hundreds of adults will want classes in the late afternoon and evening. The junior college must know a great deal about the community from which its students come and must provide for them.

The community junior college recognizes that it is a two year institution. There are students who will be going on to four year schools, but there are also many
who will be completing their education at the end of two years. The junior colleges should provide extra-curricular experiences that will differ from those institutions having juniors and seniors who give a different kind of attitude toward extra-curricular experiences that affects the freshmen and sophomores.

The community junior college has a unique function in the community. Through close work with the secondary schools it should be possible to encourage those students to enter the community junior college who can profit most from post high school education. The junior college should point out its offerings and it should accept all those students who can profit from these kinds of offerings.

Because of the nature of the community junior college, it is in an excellent position to provide life-long educational opportunity to its community at very low cost and within easy commuting distance.
CO-ORDINATING TWO-YEAR COLLEGES IN STATE EDUCATIONAL SYSTEMS

There is a growing interest in the "division of labor" among the several types of institutions at present. A recent study of the needs of higher education in California devoted a great deal of effort to analyzing the different functions of the junior college, the four year state college, and the state university.

The United States Department of Education reports that more and more states are creating official positions responsible for the state wide co-ordination, supervision, and planning of two year colleges in their educational system.

There are three approaches to incorporating junior colleges into the state educational system.

First, the local public two year college, locally controlled and in a large measure locally financed. California, Texas, Michigan and Florida are some of the states using this system.

Second, the two year college which is operated under the auspices of the state university. Wisconsin and Pennsylvania follow this system.
Third, where the control is located between the two above extremes. New York and Mississippi use this.

**Co-ordination of Two Year Colleges with the High School Level of Education**

The major problem creating the need for close and concerted co-ordination of two year colleges with the high schools is that of communicating to each of these two levels of education the purposes and programs of the other. The end result that should be sought is mutual understanding of each, in that its own success depends largely on the success of the other.

The way in which the state supervisor or co-ordinator of the two year colleges participates and supports the various co-ordinating activities by providing basic information about the two year college determines in a real way the success or failure they attain.

The problem of communication is handled in several ways. Some states have set up secondary school-college relations committees which meet several times a year to exchange information and correlate activities. Others require self study plans to be regularly carried out and reported to a central agency. Others provide counseling service and have open houses for the students in the high schools.
Co-ordination of Two Year Colleges with Other Institutions of Higher Education

The difficulties which state directors have encountered in co-ordinating these institutions with other institutions of higher education are:

first, the need to get developed and accepted a clear definition of the scope, function, and educational philosophy of two year colleges.

second, the need to do this at a time when the two year college is attracting so much public attention and has bearing upon it many forces which place on it different demands, making it a changing rather than a static, a dynamic rather than a crystallized, a formative rather than a definitive institution.

third, the problem of finding in a situation of diversity of circumstance, values, and opinions, sufficient agreement on basic elements that a start can be made toward positive, constructive actions to strengthen and expand the two year colleges.

The two year colleges as a group face one problem, and that is the determination of what sort of institutions these two year colleges should be and what sort of program they should offer. Some of the questions they must answer
for themselves are: (1) Do they conceive themselves to be primarily intended to handle the bulging enrollments in higher education? (2) Are they after quantity or quality, or do they visualize their functions diversely to accomplish both objectives? (3) If so, what is the basis for quality in a framework for quantity in higher education?

The work of the Community College Council in Florida, for example, has been instrumental in bringing about a closer understanding of the relative roles to be played by the state universities in Florida and by the community colleges. This the Council has done by carrying out its legislatively-directed duty of identifying areas in the state which have enough population to support potentially a student body in a community college of defensible size, appraising the ability of these areas to support a community college and encouraging those areas to make local surveys to determine the kind of program that the community college should offer. Through all of these steps, the two year college is defined and its scope of services and functions enunciated.
Outline of The State Organizational Plan
For Two Year Colleges in Florida

I. Control

A. Florida has the county as the basic unit in its system of school administration. The junior college is a part of this system, headed by a president.

B. A local advisory board is appointed by the state board of education. Corporate control rests in the local county board of public instruction to which the advisory committee must make its recommendations.

C. Junior colleges are supervised by the state board of education through the division of community junior colleges in the state department of education.

II. Scope of Program Offered

A. Offerings are mostly university parallel courses with a growing amount of terminal and technical work and adult education.

III. District Organization and Attendance or Service Area

A. Community colleges are maintained by a county or a group of counties which, by joint resolution approved by the state board of education agree to work together and partially support the junior
college. The county in which the college is located is the legal district.

B. A few counties which are non-supporting send students to a junior college not in the county. Students from these counties may be charged an extra fee.

IV. Financing

A. An ad valorem tax, varying according to local wealth, makes up from 10% to 50% of the current operating budget.

B. General revenue from the state, according to the formula developed for the minimum foundation program for junior colleges.

C. Fees set by the locality but limited by the state board of education regulations, not to exceed fees charged by the universities. Actually, the fees charged amount to half of this limitation or from $37.50 to $50.00 per semester.

D. Gifts and scholarships.

V. Procedures Which Must be Officially Followed and Accomplished for New Institutions to be Established

A. No specific criteria are written into the state law.

B. The procedures that are required state that approval of the state board of education is essential. The state board is following a priority system
developed by the community college council as a result of an extended study and careful planning. In order to establish a junior college a locality must:

1. Be awarded a Priority I rating.
2. Present a feasible plan for financing and for operation along with the resolution from the county school boards to the state boards of education.
3. Obtain approval of state board.

VI. Coordination of Two Year Colleges with the High School Level of Education

A. Each college works with the high schools in its own area. Mostly informal techniques are used.

VII. Coordination of Two Year Colleges with Higher Colleges and Universities

A. A professional committee for relating secondary and higher education has been appointed to make recommendations to the state board of education concerning coordination. This committee has representatives of public secondary schools, junior colleges, and the universities.
VIII. Inter-Institutional Coordination of Two Year Colleges

A. The Florida Association of Public Junior Colleges is an organization made up of the presidents of the various schools. The division of the community junior colleges in the state department of education is the responsible agency at the state level.
COMMUNITY JUNIOR COLLEGE DEVELOPMENT IN FLORIDA

The junior college movement has been in existence for some time in Florida. During this period there have been five basic principles which have formed the basis for the community junior college development.

Local control is an essential part of good community junior college operation. The oldest public junior college in Florida, Palm Beach Junior College, was established in 1933. It was conceived and has since been controlled by Palm Beach County. St. Petersburg Junior College was created as a private school but in 1947 when the minimum foundation program was passed it came under the control of the Pinellas County board of public instruction. The junior colleges at Pensacola and at Mariana were established after 1947 and became parts of their respective school systems at the time of their establishment.

Joint financial support from both state and local areas is important in providing adequate support and in encouraging local initiative. Florida junior colleges are based on the premise of providing education at low cost.
In 1947, the Minimum Foundation Program was established to provide all levels of education in Florida with at least a minimum level of financial support. This program recognized the need for junior college education especially in the larger population areas. It established minimum local effort supplemented by state contributions according to established formula for the support of all levels of education. An important reason for the soundness of the principle of joint support is that local areas are thereby permitted to go beyond the minimum program, and to enrich their junior college to the extent of local ability. This has encouraged careful administration of the junior college budget, and engendered local responsibility and pride.

The community junior college can be expected to develop most effectively if it fits into the established pattern of school administration of the state. In Florida the public school system is under the control of local boards of instruction. These boards have the corporate responsibility to organize and control all of the public schools in the county. This facilitates a high level of coordination between high school, junior college, vocational, and adult education programs.

There is an advisory board of local citizens provided for each community junior college. This committee serves
in an advisory and consultory capacity on all matters pertaining to the junior colleges. In cases where the college serves more than one county, control rests with the board in which the school is located. At the same time, the members of the advisory board are made up of citizens from each supporting county. This preserves the legal framework and at the same time permits joint responsibility for recommendations to the board which controls the junior college.

A broad concept of programs and functions is necessary to the philosophy of a good community junior college. The first law passed in 1939 authorizing Florida counties having a population of 50,000 or more inhabitants to establish public junior colleges emphasized that these institutions should include only work below the third year or junior level of universities. In 1955 the law establishing the community college council defined the community junior college as an institution offering (1) a program of general education consisting of classical and scientific courses parallel to that of the first and second years of work at a senior four year institution, (2) terminal courses of technical and vocational nature and (3) courses beyond the basic education courses for adults.
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Pages 43-45 have been omitted due to a pagination error.
All laws in Florida dealing with junior colleges emphasize the responsibility of these institutions for broad programs. The concept of broad functions for the community college as the capstone of local public education efforts has been the guiding concept of successful public junior college operation in most parts of the United States.

Continuous examination and analysis of this level of education to determine the need for improvement in all phases of the community junior college program is essential. The history of the junior college has been one of continuous improvement. In 1947 the Florida Citizens' Committee report enabled the establishment of public junior colleges as part of the total program of education in the local communities by the passing of the Minimum Foundation Program law by the Florida legislature.

The State Advisory Council on Education was established by this same law. In 1951 this body authorized a special study for the expansion of the public junior college program. This body authorized a special study for the expansion of the public junior college program. In 1953 the State Board of Control appointed a council for the study of higher education in Florida. This council in 1955 submitted a report recommending the establishment of a commission to develop plans for expanding the community
junior college in Florida. The 1955 legislature gave favorable attention to this recommendation and established the Community College Council to make this study.
THE PLAN FOR EXPANSION OF THE JUNIOR COLLEGE PROGRAM IN FLORIDA

In planning for the expansion of junior colleges in Florida the Community College Council adopted five basic policies for their development.

1. The community junior college as an institution should be locally oriented with a maximum of local controls and subject to the state board of education regulations.

2. The community junior college should become a center for post high school education and community education for adults.

3. The long range plan should envision an opportunity for the educational needs of every person in Florida to be served according to his own interests and abilities.

4. The community junior college should develop within the existing framework of public education.

5. Since the junior college will be paralleling, at the local levels, some of the work done at the universities, it is essential that these interrelated programs be coordinated and properly related.
To promote the orderly development of the state plan, three steps were developed by the Community College Council.

Step one involved a state-wide examination of the statistical data which indicated the needs of all the counties in terms of population, economics, and education. The result was the establishment of a priority system and the placement of each county in this system.

Step two involved a local survey to determine the readiness of local people to support a community junior college and to determine the feasibility of locating an institution in that area.

Step three involves the study and planning necessary before the actual establishment of a junior college.

As part of steps one and two, four priorities were established to permit and to encourage carefully planned and orderly development of these institutions.

Priority One: those areas which are characterized by larger concentrations of population, high indication of need for educational services, and demonstrated positive attitude toward such expansion and definite indication of ability to contribute to the support of a community junior college.
Priority Two: those areas which met the requirements of population and need for educational services but do not reach a comparable level in the expression of a favorable attitude toward a community college and the ability to support such a program.

Priority Three: those areas which should continue to be studied and which should be considered for later development.

Priority Four: those areas which should be developed in the future when additional evidence of need and support becomes available.

To implement the philosophy outlined by the basic policies, the following criteria were used to determine areas in Florida in which the community colleges should be located:

1. No area smaller than one county. This is the size of the basic school administrative unit as well as the size of the school tax districts.

2. When more than one county is being considered, no area should, in general, have a longer than 30 mile travel radius for commuting to and from the institution. Studies have shown that from 90 to 95% of the students in a junior college come from within a 30 mile radius of the school. Attendance drops off sharply above that figure.
3. The potential enrollment for priorities one and two should be no less than 400 full time students and the potential enrollment for priority three should be no less than 200 students. Various studies have been made in several states with the required minimum enrollment averaging around 200 students. It has been found that a well-rounded program can be developed around this figure. The potential enrollment was estimated on a basis of one junior college student for every three students enrolled in the high school grades 10 through 12. This ratio is based on studies carried on in other areas and is conservative at least in that the school population is increasing and it does not include any potential adult students. It is also based on the fact that the institutions will be local and have either free or very inexpensive tuition.

4. The growth potential of the area should be high if any of these areas are near the lower limits of these criteria.

Thirty-one areas meet the requirements for junior college development. These thirty-one areas include 98.86% of the potential community college day school enrollment. Four of
these areas are already supporting junior colleges, thus leaving twenty-seven to be developed.

The next step was carried out by conducting the local survey of the areas to establish a system of priorities in order that recommendations might be made for immediate steps to be taken in the long range plans. From the returns of the local surveys several important conclusions were reached:

1. There was evidence of sufficient interest among high school seniors in six areas (4% of the seniors in most populous areas to over 45% in less populous areas who said they would attend a junior college if it were available) to assume the successful operation of a junior college.

2. There was evidence of many adults being interested in continuing education in these areas.

3. A growing interest in technical level training beyond the high school level was expressed by employers in almost all areas.

4. Areas which made local studies concluded that the broad program outlined for the junior college was feasible and desirable in their areas.

5. Most areas indicated that temporary facilities of some type could be obtained in their respective communities.
After examining the studies, the Community College Council recommended the following priority assignments:

Priority One: Those areas which are characterized by larger concentrations of population, high indications of need for educational services, a demonstrated positive attitude toward such expansion, and a definite indication of ability to contribute to the support of a junior college.

a. Bay - Gulf
b. Volusia - Flagler
c. Marion - Citrus - Levy
d. Madison - Hamilton - Lafayette - Suwanee - Taylor
e. Putnam - Clay - St. Johns
f. Sarasota - Manatee

Priority Two: Those areas which meet the educational need and population requirements but not the financial support required or the requirement for a favorable attitude toward a junior college.

a. St. Lucie - Indian River - Martin - Okeechobee
b. Broward
c. Dade
d. Duval - Nassau
e. Lake - Sumter
f. Orange - Osceola - Seminole
g. Polk
h. Hillsborough

Priority Three: Those areas which should continue to be studied and should be considered for later development or additional development.

a. Okaloosa - Walton
b. Columbia - Baker - Union
c. Pasco - Hernando
d. Brevard
e. Highlands - Hardee - Desoto
f. Charlotte - Lee
g. Monroe
h. Manatee
i. Sarasota
j. Seminole
k. Putnam
l. Clay - St. Johns
m. Santa Rosa

Priority Four: Those areas which should be developed in the future when additional evidence of need and support becomes available.

a. Leon - Wakulla - Gadsen - Jefferson
d. Alachua - Bradford - Gilchrist
c. Glades
d. Collier
e. Hendry
f. Liberty
g. Franklin
h. Dixie

Step three consisted of the planning by local authorities in each priority locality to organize a junior college. The following questions were used as a basis for accumulating the necessary information to begin the planning.

1. How many students may be expected in the first year of the college operation?
2. What programs and courses will be needed?
3. What are the immediate local needs in terminal and technical education?
4. What are the immediate local needs for adult education and community service which may be met by a community college?
5. What facilities are presently available?

6. What sites are available? What building needs are pressing?

7. What are the staff needs?

The result of this final step, the completion of the above questions, was the actual establishment of community junior colleges.
As a result of the work of the Community College Council, the area comprised of Bay and Gulf Counties was selected for a rating of priority one regarding their status as an area for a community college.

The next step (step three) was the survey of the area and the actual needs of the area being determined as closely as possible. This survey was completed in January 1958. The result of this work was the selection of the site, determination of the educational program (actual practice will be final determinant of the program) and the determination of the building program.

Since it was not possible to predict completely the exact programs for technical, vocational and adult education, these areas will not be developed completely until the college has developed and fully organized its university parallel program. This will give the school time to get organized, concentrate strongly on the one area, and be making careful surveys to begin bringing up the other programs to full capacity. It will keep the school from trying to spread itself too thinly in an over-ambitious program and will help it develop a good strong core from which they can grow.
Therefore, the curriculum as proposed for the year 1960-61 will be as follows:

University parallel courses leading to the associate in arts degree.

- Business Administration
- Secretarial Science
- Pre-Dental
- Pre-Medical
- Teacher Education
- Pre-Engineering
- Pre-Ministerial
- Pre-Law
- General Education (Liberal Arts)

Terminal vocational and technical programs leading to an associate in arts degree.

- (initially offered) Executive Secretaryship
- Business (General, Retailing, Advertising, Management, etc.)
- Science Technician
- Junior Engineers

- (as soon as possible) Construction Trades (Plumbing, Electricity, Carpentry, Masonry, and Cost Estimating.
Some of these offered as short term work also, without A. A. degree.)

Community Service

- Institutes, short courses, clinics, forums
  - sales clinics
  - real estate institutes
  - insurance institutes
  - tax seminars
  - investment forums

Organized community recreational and cultural activities

- community chorus
- dramatics (little theatre)
- great books discussions
art
foreign languages
interior decorating

(this area of the program has not been completely determined and will reflect the demands and needs of the community.)

This curriculum is designed to serve an enrollment of 350 students in the programs dealing with post high school education. The ultimate enrollment is expected to be 750 students. This doubling of student enrollment would not mean a doubling of the building program. Most of the student body of the 350 enrollment will be enrolled in the university parallel courses. This means that the buildings will be most heavily used in the daytime. As the adult program is built up, there will be a larger enrollment of students, but many more (in proportion) of these students will be night students, and consequently will use the same academic facilities as are used in the daytime by the others.

There would be quite a strong growth in the facilities for the vocational and technical program. This group will not be operating at full capacity at the beginning, and would require special equipment and spaces, thereby limiting their use by the other programs.
THE BUILDING PROGRAM

A. Administrative - Counseling  Total Area: 9485 Sq. Ft.

The administrative space must be designed for:

1. Meeting the public.

2. Administering to the instructional and related activities of the school.

3. Carrying on effective staff and professional relationships.

4. Providing services for student personnel.

5. Providing supply and instructional materials and services.

6. Keeping and filing of records.

7. Effectively carrying on the business activities of the school.

8. Handling of internal and external communications.

This facility should be near the point at which the public enters the complex.

1. Counseling Suite

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
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<tbody>
<tr>
<td>1</td>
<td>175</td>
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</tbody>
</table>

Dean of Women

This office is responsible for the direction, guidance, and counseling of women students.

Dean of Men

This office is responsible for the direction, guidance, and counseling of men students.
2. Health Service

This facility provides physical exams, dental exams, outpatient type of treatment, and administers to certain individuals the prescribed treatments (rest, diets, etc.). This facility will be staffed by a full-time nurse with a doctor and a dentist on a part-time basis.

Waiting Area 1 120
Medical Exam Room 120
Rest Room 60
Toilet (1 w.c., 1 lav.) 20
Storage 20
Dental Exam Room 80

TOTAL 1 400

3. Registrar's Suite

This office deals with the keeping of the students' academic records, transfer, acceptance, and the registration of students in the school. It should be located near the main public area.
(Registrar's Suite)

<table>
<thead>
<tr>
<th></th>
<th>Staff</th>
<th>Area</th>
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</thead>
<tbody>
<tr>
<td>Registrar's Office</td>
<td>1</td>
<td>175</td>
</tr>
<tr>
<td>Secretary's Office</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>Waiting space for public also.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registrar's Records</td>
<td></td>
<td>150</td>
</tr>
<tr>
<td>Needs access from clerk's and secretary's office. Might even be same space as clerk's office but in fire-proof files.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registrar's Clerk's Office</td>
<td>3</td>
<td>200</td>
</tr>
<tr>
<td>Two counter openings for student registration, one full time, one during rush periods.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>675</td>
</tr>
</tbody>
</table>

4. Business Manager's Suite

This handles the finances of the school. It administers the funds used in the operation of the school, receives fee payments from students, handles loans, personnel payments, etc. This department should be located near the main public area and near the Registrar's suite.

<table>
<thead>
<tr>
<th></th>
<th>Staff</th>
<th>Area</th>
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</thead>
<tbody>
<tr>
<td>Business Manager's Office</td>
<td>1</td>
<td>175</td>
</tr>
<tr>
<td>Business Manager's Secretary's Office</td>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>Public entrance to the department.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting Office</td>
<td></td>
<td>150</td>
</tr>
<tr>
<td>Business machine located here, main files, etc. Vault also.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Manager's Clerk's Office</td>
<td>3</td>
<td>200</td>
</tr>
<tr>
<td>Payments for fees received here. Two counter positions for receiving payments and information, one position open all the time, the other during rush periods.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>675</td>
</tr>
</tbody>
</table>
5. Testing and Orientation Classroom

Two @ 750, located near counseling department for large groups

TOTAL

6. Services and Miscellaneous

Public Information Services Office
Handles public relations material.

Mail Room
Sends, receives and distributes mail.
Near Public Information Services Ofs.

Lobby, Stairs, Corridors, Toilets (staff and public), Maid's Room

TOTAL

7. Faculty Room

Library, kitchenette, used by entire faculty for relaxation, lunches, etc.

TOTAL

8. Dean's Suite

The actual administration of the school's educational, guidance, and counseling activities is from this office. There is a close relationship between this and the Directors' offices.

Dean's Office

Dean's Secretary's Office

TOTAL
9. Directors of Programs

These offices are in direct charge of evolving and carrying out their respective programs.

Director of Instruction

In charge of the curriculum, the method of teaching, and material used.

Director of Student Personnel Services

In charge of the student records, loans, scholarships, etc.

Director of Internal Services

This office coordinates all the activities and services of the school.

Director of Community Services

This office establishes communication between the school and the public. They carry out various study programs of the community needs, etc. and make recommendations.

Secretaries - Receptionists

One secretary for each two directors

TOTAL

10. President's Suite

The office of president is the most important in the school. The entire school activities and facilities are under his direction. He represents the school in the public's eye, and therefore must act as an important link between the school and the community. His is a policy making office and works closely with the Dean of Students in having these policies carried out.

President's Office

Near main conference room, possibly opening directly into it.
(President's Suite)

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
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</thead>
<tbody>
<tr>
<td>President's Secretary's Office</td>
<td>1</td>
</tr>
<tr>
<td>Service Room</td>
<td></td>
</tr>
<tr>
<td>For preparation and serving of refreshments.</td>
<td></td>
</tr>
<tr>
<td>Conference Room</td>
<td></td>
</tr>
<tr>
<td>Used as Board Room, and as reception area and conference room.</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>2</td>
</tr>
</tbody>
</table>
ORGANIZATIONAL DIAGRAM OF ADMINISTRATION

President

Business Manager  Registrar  Dean

Staff  Staff

Dean of Men  Dean of Women

Faculty Advisors  Faculty Advisors

Directors of Programs

Student Instruction  Internal Personnel  Community Service  Service
B. Library

The library in the junior college is a facility intended to house and make available for use the information and equipment necessary to carry out the curriculum of the school. Its main purpose is the housing of books, magazines, and other printed matter for the use of the students and faculty. In addition it houses other equipment such as films, projection equipment, audio-visual aids, tapes and recordings which are used in the school program.

The library represents the intellectual center of the campus. It should have a fairly central location but should be in a position conducive to the type of activity carried on within.

The library should be one in which expansion is easily undergone, for as the school grows the need for a larger library will grow with it.

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
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<tbody>
<tr>
<td>2875</td>
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</table>

1. Reading Space
   - 115 students @ 25 sq. ft. each

2. Periodical and New Book Area
   - this could be a separate area or part of the reading area.
   - 400

3. Stack Space
   - Open stacks, located in same area as reading room. Stacks for 20,000 volumes.
   - 750
4. Work Room

Space for ordering, receiving, marking, and repairing material in library.

5. Librarian's Office

Near work room and control desk. Space for librarian and three assistants.

6. Control Desk

Checking out and receiving books and materials done here. Information and control center.

7. Conference Rooms

One @ 200 sq. ft. One @ 100 sq. ft. Used for staff conferences as well as instructor-student conferences. Could also be used to preview audio-visual material.

8. Audio-Visual Storage and Work Room

Storage, repair, and preparation of films, projectors, screens, etc.

9. Storage Room

Storage of supplies, books, equipment, etc. not presently in use.

10. Record Library

Storage of tapes, records, etc.

11. Listening Rooms

Two @ 60 sq. ft. Sound isolation necessary.

12. Corridors, Toilets, Lobby, etc. @ 30% of total

Toilets: Men - 1 w.c., 2 lav., 1 urn. 
Women - 2 w.c., 2 lav.

TOTAL

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
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<tbody>
<tr>
<td>4</td>
<td>150</td>
</tr>
<tr>
<td>1</td>
<td>75</td>
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<tr>
<td>3</td>
<td>200</td>
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<tr>
<td>2</td>
<td>300</td>
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<tr>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>1</td>
<td>150</td>
</tr>
<tr>
<td>1</td>
<td>120</td>
</tr>
<tr>
<td>1</td>
<td>1630</td>
</tr>
<tr>
<td>4</td>
<td>7150</td>
</tr>
</tbody>
</table>
C. Lecture Hall

This facility will be used for drama school productions, special T.V. closed circuit lectures, special academic programs and community cultural programs. It should be close to fine arts department. The amphitheatre could use its stage.

<table>
<thead>
<tr>
<th>Area</th>
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</table>
| 1. Stage | 1500  
| 30' proscenium with light grids and full wing space. |  
| 2. Seating | 3200  
| 400 seats @ 8 sq. ft. each. Auditorium type seats. |  
| 3. Lobby | 1200  
| 3 sq. ft./seat. Movable ticket booths. |  
| 4. Green Room | 400  
| Could be used as dressing room if necessary. |  
| 5. Projection Booth | 200  
| T.V. and film projection. Light and sound control. |  
| 6. T.V. Room | 200  
| Storage for equipment. Control booth, etc. |  
| 7. Dressing Rooms | 200  
| One men and one women, @ 100 sq. ft. each. |  
| 8. Circulation | 2000  
| Stairs, corridors, mechanical space. 30% of total. Toilets: Men - 2 w.c., 3 lav., 3 urn. Women - 3 w.c., 3 lav. |  
| TOTAL | 8900  

D. Student Service Center

This facility operates as the center of student social activity. All types of student activities take place here such as dances, special programs, lunch hour lectures, receptions, as well as student government activities.

Fairly close proximity to administration desirable for control and communication.

<table>
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<th>Staff</th>
<th>Area</th>
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</table>

1. Dining and Social Area

250 seats @ 10 sq. ft. each. Area used for special events as well as dining. 2500

2. Kitchen

Manager's Office
Receiving
Food storage and freezer
Toilets and locker facilities
Main food preparation and cooking area

3. Serving Area

Steam tables, counters, cashier. The above may operate separately from the below and may be located on upper floor.

4. Snack Bar

Could be in conjunction with store.

5. Campus Store

Sale of books, supplies, etc.

6. Student Government and Publications Offices

Five student offices, work room and conference room 1000

7. Staff Offices

Two @ 100 sq. ft. each. These work with students on programs, etc. 200
8. Student Lounge

Best on ground floor near entrance

9. Toilets, Corridors, etc. (30% of total)

Men - 2 w.c., 3 lav., 3 urn.
Women - 3 w.c., 3 lav.

TOTAL

E. Physical Education

1. Gym

Intra-mural activities as well as regularly scheduled class activities take place in this facility. A position near playing fields and the beach is desirable.

Two Basketball Courts

11000

Locker Rooms

Men - 210 lockers for men
Women - 140 lockers for women

Shower Rooms - 20 heads @ 15 sq. ft. each

Men - 12 heads for men
Women - 8 heads for women

Toilets

Men - 2 w.c., 3 lav., 3 urn.
Women - 3 w.c., 3 lav.

First Aid Room

Cot, first aid equipment, oxygen tank, blankets. Near office.

Offices - 2 @ 150 sq. ft. each

Equipment Room

Charges out equipment, towels; checks valuables

Circulation, Corridors, etc. (20%)

TOTAL

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
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<tbody>
<tr>
<td></td>
<td>800</td>
</tr>
<tr>
<td></td>
<td>2100</td>
</tr>
<tr>
<td></td>
<td>2800</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>9200</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>16,800</td>
</tr>
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</table>
2. Outside Development

<table>
<thead>
<tr>
<th>Activity</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volley Ball Courts - 30 x 60</td>
<td>4</td>
</tr>
<tr>
<td>Tennis Courts - 60 x 120</td>
<td>6</td>
</tr>
<tr>
<td>Softball Diamonds - 200 x 250</td>
<td>2</td>
</tr>
<tr>
<td>Basketball Courts - 50 x 94</td>
<td>2</td>
</tr>
<tr>
<td>4 Hole Golf Course</td>
<td>1</td>
</tr>
<tr>
<td>Swimming Pool - 35 x 75</td>
<td>1</td>
</tr>
<tr>
<td>Boat Dock</td>
<td>1</td>
</tr>
<tr>
<td>Handball Courts - 20 x 40</td>
<td>4</td>
</tr>
<tr>
<td>Badminton Courts - 20 x 44</td>
<td>6</td>
</tr>
<tr>
<td>Horseshoes - 10 x 50</td>
<td>4</td>
</tr>
<tr>
<td>Archery - 30-100 yds., 5 yds. apart</td>
<td>6</td>
</tr>
<tr>
<td>Shuffleboard Courts - 12 x 52</td>
<td>4</td>
</tr>
</tbody>
</table>

F. Utility and Maintenance

<table>
<thead>
<tr>
<th>Area</th>
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<tbody>
<tr>
<td>500</td>
</tr>
<tr>
<td>300</td>
</tr>
<tr>
<td>300</td>
</tr>
<tr>
<td>1000</td>
</tr>
<tr>
<td>2100</td>
</tr>
</tbody>
</table>

G. Amphitheatre

Seating for 1000. Close to theatre for use of stage and dressing rooms, if possible. Bench-type seating, with backs. Close to public parking and near entrance if possible.

F. General Classroom Facilities

This facility is used for teaching liberal arts courses such as English, humanities, and history. More students from this group would make use of the library than from the others, so a fairly close relationship with the library is desirable.
1. Classrooms

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
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<tbody>
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</table>

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 @ 750 sq. ft.</td>
<td>7500</td>
</tr>
<tr>
<td>1 @ 1000 sq. ft. with platform</td>
<td>1000</td>
</tr>
<tr>
<td>1 @ 500 sq. ft.</td>
<td>500</td>
</tr>
</tbody>
</table>

2. Faculty Offices

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
</tr>
<tr>
<td>6 @ 150 sq. ft. each.</td>
<td>900</td>
</tr>
<tr>
<td>2 staff in each office.</td>
<td></td>
</tr>
</tbody>
</table>

3. General Storage, Maintenance, Corridors

(25% of total)

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2500</td>
</tr>
</tbody>
</table>

Toilets: Men - 5 w.c., 4 lav., 2 urn.
Women - 6 w.c., 4 lav.

TOTAL

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>12,450</td>
</tr>
</tbody>
</table>

G. Fine Arts Facilities

Art, drama, and music taught here. This facility is related closely to the lecture hall and amphitheatre for activities such as drama productions, recitals, etc. This group and the general classroom group are not expected to grow too much in the future, as they have been sized to handle a full curriculum with the potential enrollment accommodated.

1. Combination Instrument - Choral Room

1280

Peripheral storage for instruments, uniforms, and robes. Room must be sound isolated.

2. Practice Rooms

300

Three sound-isolated rooms varying in size.

3. Offices

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music</td>
<td>2</td>
</tr>
<tr>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Fine Arts</td>
<td>2</td>
</tr>
<tr>
<td>150</td>
<td></td>
</tr>
</tbody>
</table>
4. Fine Arts Laboratory

5. Fine Arts Classroom

6. Corridors, Toilets, Maintenance, Reception (25% of total)

Toilets: Men - 2 w.c., 2 lav., 1 urn.
Women - 3 w.c., 2 lav.

TOTAL

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4500</td>
</tr>
</tbody>
</table>

H. Business Education Facilities

This facility will be used mainly as a vocational facility. The classrooms are similar to any classroom except there will be business machines in them. This requires necessary wiring for latest equipment.

1. Typing Rooms - 2 @ 750 sq. ft. each
2. Secretarial Science Room
3. Faculty Offices - 2 @ 150 sq. ft. each
4. Reception, Toilets, Corridors, Storage Space (25% of total)

Toilets: Men - 2 w.c., 2 lav., 1 urn.
Women - 3 w.c., 2 lav.

TOTAL

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3185</td>
</tr>
</tbody>
</table>

I. Science Facilities

This facility would be used to train the scientific and engineering technicians as well as provide the necessary science courses for the liberal and fine arts students.
It will be expanding as the needs of the community are more clearly defined and more demanding.

1. Botany
   Laboratory
   Preparation
   6 tables with 4 students each and demonstration table

2. Biology
   Laboratory
   Preparation
   6 tables with 4 students each and demonstration table

3. Chemistry
   Laboratory
   Preparation
   Project Room
   6 tables with 4 students each and demonstration table

4. Physics
   Laboratory
   Preparation
   Project Room
   6 tables with 4 students each and demonstration table

5. Mathematics and Earth Sciences
   4 classrooms @ 750 sq. ft. each

6. Lecture Room
   Used for regular lectures and television lectures. Auditorium type seating for 125 with platform and screen at one end.
7. Faculty Offices

3 @ 150 sq. ft. each, near lecture hall

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>450</td>
</tr>
</tbody>
</table>

8. Corridors, Storage, Toilets, etc.
(20% of total)

Toilets: Men - 3 w.c., 3 lav., 2 urn.
Women - 4 w.c., 3 lav.

<table>
<thead>
<tr>
<th>TOTAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>10,750</td>
</tr>
</tbody>
</table>

J. Technology Facilities

This facility used mainly as a vocational facility to train engineering technicians and draftsmen and for pre-engineering students.

1. Drafting Lab

Descriptive geometry, engineering drawing, etc. taught here.

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1250</td>
</tr>
</tbody>
</table>

2. Precision Measurements Lab

Used to teach use of all types of testing and measuring equipment.

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>750</td>
</tr>
</tbody>
</table>

3. Industrial Technology Lab

Used to teach use of machine tools and methods in industry and science.

<table>
<thead>
<tr>
<th>Staff</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1500</td>
</tr>
</tbody>
</table>

4. Storage, Mechanical, Corridors, etc.
(20% of total)

Toilets: Men - 2 w.c., 2 lav., 2 urn.
Women - 1 w.c., 1 lav.

<table>
<thead>
<tr>
<th>TOTAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4200</td>
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</tbody>
</table>
THE SITE

The Gulf Coast Community College is to be located in Panama City, Florida. The city is located on the Gulf Coast side of Florida on the thin strip of Florida that stretches toward New Orleans. The city is located on the shores of the Gulf itself.

Panama City has a population of about 50,000 with three military installations nearby which contribute to its population. This area is becoming increasingly industrial with an emphasis on light industry.

The whole area along the Gulf coast is characterized by vegetation-covered sandy peninsulas that are interlaced with fresh and salt water inlets, bays, and channels. Coupled with this is the luxurious vegetation that is everywhere and grows very rapidly. The life of the entire area is very strongly influenced by the strong character of the landscape as well as by the weather. Life is rather casual with a great emphasis on the water for livelihood and for recreation.

The site itself is located on the western edge of the city near Sulphur Point. Toward the north are North and West Bays, which are much used as a recreational
area by the community. To the west of the site is a police station and immediately beyond that is the wide channel which connect the bays to St. Andrews Bay. Across the highway to the south is a naval supply depot and to the southwest and east are residential areas.

The site itself is borded on the north by State Road 390A, a lightly used road, and on the west by Moody Street. The south border is formed by U. S. Highway 98 which connects Panama City to the beach cities to the west and leads directly into downtown Panama City, two miles southeast of the site. Most of the students will come from this direction. Marshall Avenue forms the rest of the southern border and leads to the residential areas to the east and north. Directly to the east the area continues in undeveloped heavy vegetation for several hundred feet before the residential area begins.

The entire site is 80 acres in size, but not all of this can be built on. The eastern portion gets quite low and where it gets down to two feet above sea level it has been covered by a foot of water during hurricane tides. The normal tide is 12 to 18 inches. The western portion is the best for building, even though it is all sand below the surface. At present this area is sodded and has many trees, since this portion of the site was residential.
THE CLIMATE

Panama City, Florida is located in an area where the climate is completely different from that which we are acquainted with here in the North. This area of the United States—the southern Atlantic coast and the Gulf coast to Texas—is called the humid subtropical or modified monsoonal climatic type. It is characterized by rainfall throughout the year, by hot summers which are made relatively enervating by high humidity, and by generally mild winters.

The colder waves in Florida do not occur sufficiently to make this a stimulating climate. Another unfavorable aspect as well as the humid heat in the summer and the lack of stimulating temperature change is the abundance of torrential rains. The presence of more severe storms is another disadvantage. The most numerous is the thunder-storm, which here surpasses in frequency and intensity the other American climates. Tornadoes are more numerous than in three quarters of the country, and tropical cyclones cause more frequent damage than in any other climate in the U. S.

The Gulf of Mexico affects temperatures only slightly, except by prolonging the frost-free season. Precipitation
is appreciably less near the coast in the winter and spring but during autumn and summer rain is heavier on the coast than inland. The Gulf produces a greater increase of relative humidity in summer than in winter.

The normal annual temperature is 70°. The normal winter temperature is between 55°-65°. The normal summer temperature is between 80°-90°. The cold season lasts only a very short time, usually December through February, with January the coldest month. Even then less than 10% of January nights are below freezing. The maximum temperature varies from 70° in January to over 90° in July.

Florida has 1000 degree days (sum of the amounts by which the normal temperature of each day cooler than 65° is less than 65°). It has approximately 100 days a year when the temperature is desirable (65°). The Florida area also has an annual average total of 1500-1700 hot degree days (sum of amounts by which the normal temperature of each day with a normal temperature above 70° exceeds 70°).

The normal surface wind direction in this area in the winter is from north to south with a speed of 8 to 12 miles an hour. In the summer it is from south-south-west to north-north-east at a speed of 8 to 12 miles an hour.
With regard to humidity, the January average is 70-80% relative humidity while in July the average relative humidity is over 80%. While July is the month of highest humidity, this is also the period when the rainfall is the greatest. In the summer there is 20" to 24" of precipitation and in the other three seasons there is an average of 10" to 12" in each. This results in a total of 60" of precipitation annually. This precipitation occurs mostly in the form of frequent brief heavy rainfalls.

The latitude of Panama City being 30°, the angles of the sun can be measure quite easily. Below is a chart of the various angles of the sun during the year.

<table>
<thead>
<tr>
<th>June 21</th>
<th>Sept. 21</th>
<th>March 21</th>
<th>Dec. 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>8</td>
<td>98</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>92</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>84</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>70</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>70</td>
<td>75</td>
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<tr>
<td>2</td>
<td>84</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>92</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>98</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>
THE CLASSROOM

Size and Shape

The classrooms are to be designed for 30 students at 25 sq. ft. each. This results in a classroom size of 750 sq. ft. as recommended by the Florida state department of education. The rectangular or square classroom still seems to be the most satisfactory for this level of education. With the formal relationship that exists between the instructor and students with the students facing the professor, who conducts the class from his position in front, the rectangle serves well. It also allows the room to be used for seminars and group discussions by a rearrangement of the furniture. It also provides an arrangement of glass areas on the two side walls which allows for light to come from the side and for air to move completely through the classroom. This also means that the classrooms can be arranged in groups in such a manner that the greatest share of them can have the ideal orientation for light and air.

Light

The room should be designed so that there is an equal distribution of light, the proper amount, and no glare. It is
most desirable that the major light source come from the left.

There should be an even distribution of light so the eye does not have to constantly make adjustments, and so there are no shadows thrown that impair vision. There should be no classwork being done in the direct rays of the sun.

Glare may be caused by an over-bright light source in the field of vision. Strong lights reflected from light surfaces also causes discomfort to the eye. Extreme contrasts such as bright lights against dark backgrounds or dark window mullions against a bright sky also cause discomfort. The proper use of landscape to reduce glare on ground surfaces and buildings can be a great help in reducing glare.

An even, over-all artificial lighting system that can be used on very dark days and at night is also necessary. This should be done in such a manner that the light source itself is not in the line of vision by the student.

Natural Ventilation

Changing air has been proved necessary to comfort and health. Air movement in a classroom is especially vital for several reasons. Body odors, which may be obnoxious, should be removed from the classroom. Air movement aids
in temperature control by creating circulation and preventing air and heat stratification with hot air at the top of the room. Air movement also helps in regulating the relative humidity.

Natural ventilation is the process of supplying and removing air by natural means into or out of any enclosed space. The natural means of creating air movements are wind and differences in temperature between inside and outside air.

As wind blows against the side of a building, most of it is forced around or over it. Some air is forced around or over it. Some air is forced into openings in the building itself. The result is that a high pressure area is built up on the windward side. On the opposite side, the leeward side, a low pressure area is formed. This effect can be of great use in creating air movement in the building. By providing large openings in both the windward and leeward sides of the buildings, we can create a movement of air through by the high pressure area being forced into the openings and being sucked out on the opposite side by the low pressure area. The maximum amount of air flow is possible when both walls are opened completely. To increase the velocity of air flow, the outlet openings should be larger than the inlet openings. It is best to place the buildings across the direction of the
prevailing winds for the maximum amount of air flow through the buildings.

**Visual Aids**

With the continued use of projection equipment for presenting instructional material in the school program, the problem of how best to provide for projection becomes very important.

The place to present audio-visual material is in the classroom or lecture hall, which is always available to the professor when the time comes in the course for the presentation of such material. Complete darkness is rarely necessary, but it should be possible to obtain the desired degree of darkness without excessive expense and without sacrificing good quality natural or artificial lighting or ventilation.

The classroom should be so handled that a screen could be placed so it can be easily viewed and so no light falls directly on the screen. The same principle holds true for television, which requires even less darkening of the room than does film and slide projection. The proper sized electrical conduits must be provided for the projectors and for the television sets. It may not be too long before the television set as we know it may
be replaced by a television set that is a flat screen with the electrical components below the screen. The same principles of viewing would still hold true.
ANALYSIS

The solution to the problem of the design of a public junior college for Panama City was strongly affected by several things. The most important of these things were the concept of what a junior college is, the climate, the site, and the problem of expansion. These problems are all inter-related with one another.

A school is an institution which makes the student look inward and it forces him to develop himself as an individual. Since it is an intellectual development, the student must be very aware of himself and his own development to progress. Yet a school is made up of a group of students which in turn take a part in the community. The student is thus required to always consider himself as an individual and as a member of a group. In a sense he has to be both inner-directed and outer-directed.

I chose a basic form for the planning of the school which reflects this idea. It consists of a series of four groups, each revolving around a strong central space. At the point around which the entire group revolves is the library, a building which represents the intellectual center of any institution of learning. Radiating out
from this group and forming strong elements that relate the group to the various activities which surround it are four strong elements. These strengthen the relationship of the school to its environment and form the links to the community which exists around it. They would be important elements in the visual image one would have of the school as would the major and minor courts.

The best manner in which a school can expand seems to be that in which the basic organizing principle is made strong and clear so that expansion can take place without affecting the strength or clarity of the original concept.

This idea is also embodied in the form that was just described. The strong central space and the radiating links form four quadrants in the over-all plan. The school is thus free to expand in all four directions without destroying the strength or clarity of the original form.

The most important feature of the site is its position near the water. To strengthen this, the whole group was given a strong tie to the water by opening a wide channel directly to the major space, and by positioning the entire group to orient toward the water.

The site is best approached from the south with the entrance just off the highway. This makes the position of
the administration and student center close to the entrance desirable. The lecture hall also assumes an important position by being directly across the main court with the amphitheatre directly behind so it can use the same stage facilities.

The gym is in such a position that it is close to the beach and boat dock and also close to the playing fields.

The two academic groups are located in such a manner that they have the most desirable orientation for expansion and for climatic reasons. The expansion for both would take place around open spaces which would occur off the group space. This expansion could take place in two directions.

The open spaces of the two academic areas would have an umbrella of tees over it creating shaded study areas. The main court would have a series of rows of trees around its perimeter but leaving the main area open to emphasize its importance and create a strong change in the expression of the kind of space it is.

The climate has a very strong affect on the structure and the orientation. Because of the prevailing breezes, the buildings, which are naturally ventilated, are placed across their path. The solar roof system derived from a desire to provide shelter from sun and rain and take
1 - Administration
2 - Physical Education
3 - Fine Arts
4 - Liberal Arts
5 - Science Technology
6 - Business Education
7 - Parking
8 - Athletic Fields
9 - Lights
advantage of principles from solar shading for cooling effects which have been in use for a long time and proven to be very effective. Such an example is that of the solution shown by the indians of the Yokut Tule Lodge in California who not only protected their huts but in a generous, direct manner provided for pleasant shaded living and communal areas. The resultant solution is also very effective in creating a unified architectural expression which allows for strong definition of the spaces and yet for variety within the form. It also gives a strong regional expression to the architecture.

The classrooms themselves are handled in such a manner that they can be completely opened on both sides to get as much breeze through as possible. The system of louvers are so placed that they will keep direct sun out of the classroom and they can be closed completely to control the light for projection of visual material.

The final solution, then, is one in which all of these things have been considered to create a solution which embodies the spirit of the junior college, allows for expansion, and recognizes its site and climate.
B I B L I O G R A P H Y


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----, "Florida School Facilities Conference, March 22-23-29, 1956".


