A number of innovations at Golden West College are designed to update and improve junior college education. The use of an audiotutorial approach (patterned after the Oakland Community College project) in liberal arts biology resulted in a 66-percent decrease in failures and dropouts, an increase of from one-third to one-half in course content, and an increase in "A" grades by a factor of 3. A social sciences course and an economics course emphasize the interrelatedness of several disciplines. A common core of related studies forms the foundation of the vocational curriculum in which the student becomes increasingly specialized as his study progresses. The counseling program emphasizes the necessity of aiding the students in making their own final decisions. Various developments involve the college directly in the problems and activities of the community. This paper was presented at the Invitational National Seminar on the Experimental Junior College (Palo Alto, February 23-26, 1967). (AD)
TOWARD INNOVATION

(The Golden West College Story)

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UNIVERSITY OF CALIF.
LOS ANGELES

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CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

Invitational National Seminar
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The central intention of this new community college is to open new areas of perception, understanding, and meaningful encounter for students and faculty. It is a determination to be relevant, to be daring in its approach to the educative process while keeping up with burgeoning enrollments and the ever broadening spectrum of intellectual development.

Surely there is no better time to clear away old taboos and move in new directions, whether this be adaptations from older, proven experiments, or setting forth in the unknown. Whatever the course, the college finds its most cogent expression in becoming "a lively center for learning" -- a threshold to the 21st century where adult and youth can take full measure of their new world, its escalating technology, the meaning of the atom, computers, rocket engines, population explosion, and emerging new nations. For it is clear that only the disciplined mind can determine the significant issues, and begin to suggest possible answers -- not timidly, but tentatively -- to the questions of our age.

As a new institution Golden West College is relatively free of the restrictions which have grown up in established, traditional instructional approaches. The opportunity and challenge of facilitating student learning through responsible experimentation and innovation have been accepted, indeed, encouraged by faculty, administration and Board of Trustees.

The college opened in September, 1966, in a new, carefully planned $5 million facility in one of the most rapidly growing areas of Orange County. The initial enrollment of regular day, freshman and sophomore students exceeded 2,000. Some 3,000 additional persons are pursuing lower division and adult education studies in the evening college. Approximately 40 per cent of the day students and 89 per cent of the evening students are adults; many are finding in this new institution meaningful pursuits in career retraining as well as cultural and intellectual development. Continued growth in enrollments is projected, with a 15 per cent increase anticipated in the 1967-68 academic year.

An initial status of candidacy for accreditation is approved by the Western Association to Schools and Colleges. It is expected that the college will receive full accreditation, working through normal procedures, at the conclusion of the preparatory period.
Evidence of Golden West's posture toward innovation, and readiness to reflect the dynamism of the communities it serves, is seen in at least five major areas...

I. Faculty.
II. Architecture and Land Use Design.
III. Curriculum and Instruction.
IV. Counseling and Guidance.
V. Community Involvement.

I. Faculty

The present, 78 full-time faculty members are experienced teachers and administrators, most of whom have served the profession in junior colleges and other higher education institutions. But more than that, each member was hand picked from 1,500 applicants in anticipation of personal readiness to contribute to an innovative spirit. They are adventurers all, who have the qualities for creative teaching and the incentive to search for better ways to approach the teaching-learning process encountered in a diverse student body. They are the essential key to any experimental junior college without whom there will be no movement off of center. Perhaps the most common characteristic of this faculty is sensitivity to the changing posture of the local community, and academic and educational worlds. This commitment requires constant evaluation of curriculum, and openness to change.

To facilitate responsiveness to changing conditions while adhering to expressed institutional philosophy and goals, the curriculum committee of Golden West College is charged with leadership in curriculum development. In addition, vested in the committee is the power to recommend or not to recommend for approval proposals of curricular nature to the district superintendent. In every case, the committee has the responsibility for making known to the faculty the bases for its decision.

For maximum effectiveness the committee is composed of ten permanent members representing the various interests of the college, two annual members from the Faculty Senate, and administrative and faculty advisers who have expertise in a given area under consideration. The exact composition of the committee is as follows:

(1) Dean of Instruction, Chairman
(2) Division Chairmen
(3) Counselor
(4) Librarian
(5) Dean of Evening College
(6) Faculty Senate Chairman
(7) Faculty Senate appointee

The sources of curriculum development the committee shall consider are as follows: Golden West instructors, coordinators, administrators, counselors, other institutions, Education Code, community, and students.

II. Architecture and Land Use Design

Unique in the planning of Golden West College is the design of land use and buildings. The fact is the college will never be complete. Twelve units, with a total of more than 150,000 square feet, are in the initial increment. They will never be complete because they represent only a part of the whole, and the whole itself has no end. An ever-changing, constantly expanding, dynamic curriculum can be confined to a rigid environment only at great peril. So the buildings at Golden West College are designed to stand as a bold statement to change.

What the architects, William L. Pereria and Associates, were asked to do was incorporate growth and change into the design as opposed to merely providing for them as best as possible. They responded with a master plan of 40 by 40 foot grids, a post and beam style of construction with no bearing walls -- and a capability of growing five times within the same 122.5-acre site dimension.

Already space allocations have changed many times, and the changes always have been in response to new ideas, new needs, and evolving curriculum.

The architects started by taking a close, hard look at terrain. They had a dead level site, a sun-drenched sky, surrounding vacant fields of unknown future, and the definite prospect of a freeway on one side of the campus or the other. For these reasons they attached considerable importance to creating a sense of place, of community, and relatedness between academic disciplines. To achieve this they concentrated the buildings in the center of the site, placing parking and athletic fields on the periphery. By means of landscaped earth berms they insulated and defined the interior campus. The berms also are functional. They reduce surface street noise, and conceal the parking lots.

The buildings are "continuous structure," meaning that new units may be tied into existing ones either horizontally in 40 by 40 modules or vertically up to four stories. The walls are non-bearing and
DIVERSE EDUCATIONAL TASKS

EVALUATION INTERFACES

INSTRUCTIONAL RESOURCES & TECHNIQUES

GUIDANCE INTERFACES

HETEROGENEOUS LEARNER CHARACTERISTICS

THE CONCEPTUAL MODEL
removable, the weight being supported by the columns and beams. Five load centers contain all of the basic mechanical and electrical equipment, switchgear, telephone and communications systems, and restroom facilities. As a result all types of space may be developed within a single module, a flexibility not possible in more conventional construction with fixed limitations.

Eventually all of the campus will be interlocked on a grid pattern allowing movement in any direction, yet preserving a cohesive unity and the necessary aesthetics.

But just as no hospital building ever cured a patient, no college plant ever educated a student. The educational process must be, above all, dynamic. Its substructure is curriculum, and once this becomes absolute and unchangeable, improvements are discouraged and, eventually, inspired teaching dies out. Similarly, when colleges are designed to house an inflexible program, the buildings tend to become an obstruction rather than an aid to teaching. The Golden West College network of buildings makes it possible for curriculum, as expressed by faculty, to directly influence the form and plan of the structures.

III. Curriculum and Instruction.

Junior colleges are distinctive among institutions of higher learning in the emphasis they place upon teaching. It is therefore surprising that they have initiated so little research directed at the improvement of instruction. This is especially paradoxical in light of the difficult teaching-learning problems posed by the heterogeneity of students and diversity of curricula found in most comprehensive community colleges.

One of the basic goals at Golden West College is improvement in student learning, and this aspiration is programmed in two phases: a one-year feasibility study followed by a long-range research effort.

The college is presently engaged in phase one, starting with analysis of generally agreed variables to learning -- characteristics of the learner, the nature of that which is to be learned (the tasks themselves) and the instructional resources employed. The objective is to determine an appropriate research design, project financial support requirements, and assess the probable value of a five-year instructional research program.

Underlying such a study are these basic assumptions:
1. Relationships among selected student characteristics, learning tasks and instructional resources have not been thoroughly studied in a junior college context, and...

2. An understanding of these relationships would permit changes to be made which would facilitate student learning.

The first step has been the formulation of a conceptual model which depicts "instructional resources" as a mediating variable between learners and their educational tasks. It assumes an interaction among selected characteristics of the learner, instructional resources employed and learning tasks.

For example, the model postulates the existence of a continuum on which can be arrayed a variety of teaching-learning situations such as the following:

1. Conventional teacher-directed approach to subject mastery involving lecture-discussion techniques in either small or large groups instruction.

2. Teacher-supervised association and reinforcement exercises, individually pursued by student, scheduled simultaneously in conjunction with classroom instruction.

3. Supervised self-instruction in remedial exercises and skills development with sequential practice where goals and pacing are student-defined.

4. Individual or group-directed case studies and management games providing resistance inputs, problem-solving sequence results in independent decision-making on the basis of logic.

5. Contemporary problems approach to interrelated disciplines in the sciences, humanities and social sciences based on seminar feedback resulting from student-selected programmed experiences.

6. Total receptor audio-instruction in laboratory exercises where pace and progress are adjusted independently by the student.

7. Self-directed pursuit of learning experiences where student selects materials and media and pace both scope and sequence of the learning experience.

The usefulness of this model is now being tested through a number of innovative approaches, in academic studies and student activities.
and if valid may serve as a frame of reference for the research program to follow.

A. Total Receptor Audio-Instruction

The audio-tutorial approach in liberal arts biology courses is the boldest example of innovative curriculum at Golden West College. Initial interest in it was stimulated by a conference at UCLA on January 4, 1966. This was followed by a visit of the dean of instruction to Oakland Community College in Michigan, and contact with Dr. Samuel Postlethwait at Purdue University. Drawing heavily on their information, and a quick trip to Purdue to see Dr. Postlethwait's work firsthand, our biology instructors began planning "Western TRAILS" (Total Receptor Access--Independent Learning System) to be offered in the fall of 1966. Through the spring they met on their own time, wrote a topical outline, and agreed on content and objectives. Their planning followed these sequential steps:

1. Defining each goal in measurable terms.
2. Establishing a hierarchy of goals for greatest emphasis in the course.
3. Determining the time to be given to each unit, or goal.
4. Arranging units in sequence -- weekly wherever possible.
5. Determining the best way to achieve the objective of each unit without regard to mechanics of budget, schedule or staffing.
6. Assessing realistically the obstacles to established objectives, and finding ways to achieve the objectives within the limitations always inherent. Part of this problem relates to a "nostalgia for the past" or to such real or imagined faculty fallacies as "The administration won't let you do it that way, so why try?", "The poorer students won't learn anything," "How will you get around the evening college program?, "The business manager will veto your ideas."
7. Recording tapes, writing and preparing workbooks and laboratory materials.
8. Securing from the dean for institutional research an identification of the kinds of data which must be assembled to assure adequate evaluation of the program from its inception.

After a semester's experience in operation, the audio-tutorial laboratory has attained highly favorable results.

+ Course content increased one-third to one-half.
Failures and drop-out decreased by 66 per cent.

"A" grades increased by a factor of 3.

Not only has the system been popular with students, but other faculty are seriously exploring its use in business, technology, and English. What makes the system immensely attractive is the possibility afforded for independent student study, and for instructors to give individual attention, goals which have been discussed in American education since the turn of the century but which only lately have been a realistic possibility through creative use of hardware.

It should be emphasized that the audio-tutorial system is more than lectures on tape. It is an integrated learning experience, combining the best media and method to achieve pre-determined objectives.

At the beginning of the week the student attends an hour-long lecture, a large-group general assembly session or "GAS" session. Material for the week is presented and objectives described.

This is followed with a minimum of four hours in the lab where the student works in a carrel equipped with a tape recorder, workbook and equipment necessary to the particular exercise. He takes instruction from taped lessons, but it is not all that impersonal. A tutor is present at all times for guidance and help if a concept is unclear or he is confused.

At the end of the week the student meets in a "SAS" session, or small assembly session of fewer than 25 people, to talk over with the instructor what he did during the week. This is concluded with a 20-point quiz.

The total experience -- lecture, lab, and bull session -- are integrated, so that the student is not bolted to the chair for hours on end. At certain points the tape will tell him to turn off the machine and use one of six continuous-loop projectors and an 8mm film to watch a cell dividing. He sees the film when he is ready for it. Or the tape may tell him to carry out an experiment at one of the demonstration tables and record information in his workbook.

Considering that the instructors had no prior experience in audio-tutorial, only a brief time with Dr. Postlethwait, no equipment, an unfinished campus, and an immediate deadline, they delivered a small miracle in setting up the program.
Borrowing typewriters, tape recorders, part-time help and office space from Golden West's sister institution, Orange Coast College in Costa Mesa, they set to work to write their programs eight weeks before the opening of classes. And six weeks after moving to the new campus they had the laboratory in operation.

A student critique at the end of the first semester confirmed a number of earlier assumptions. They had thought, for example, students would prefer the audio-tutorial method over the traditional lecture, and, on a rating scale of 10, 7.1 per cent said this was the case. Freedom to use the lab at student convenience rated 8.7, which they consider outstanding. Students likewise gave outstanding ratings to programmed instruction, use of workbook, and integration of tape and demonstration table.

B. Interrelated Disciplines -- An Approach to Contemporary Problems

Two new courses are offered at Golden West College along lines of a team approach among several disciplines. One is in the social science division taught by a history and an English instructor. The second is in the business division and combines the theoretical and applied principles of economics by utilizing a business teacher and social science teacher.

The first course includes the disciplines of anthropology, sociology, psychology, history, philosophy, literature, and a general approach to the scientific method. The purpose of the course is to integrate the knowledge the student has accumulated from each discipline, separately, at the most important level: the common philosophy, problems, and theories shared by those who are engaged in any of the social sciences. The student learns to define the social disciplines by analysis rather than by function, and to articulate his own creative definitions of society. The course attempts to clarify the philosophical method, or the logic, by which each discipline becomes selective, and the manner in which all of the social disciplines overlap. Literature, for example, graphically dramatizes many psychological and social problems; the method the anthropologist uses must be integrated with the scientific method and with history; the sociologist and psychologist share motives and ends. The class meets three hours weekly, in seminar, including once-a-week "motivational" lectures.

The economics course is an attempt to clarify issues and to resolve traditional controversies surrounding how economics should be taught and who should teach it. Both business and social science members teach it. The presentation is both theoretical and practical; illustrative material and case studies amplify and dramatize the theoretical approach.
C. Core Concept in Vocational Education

The impact of automation and press of new technological flow processes has caused the virtual disappearance of unskilled and semi-skilled labor, while greatly extending needs for fulfillment in one's preparation for technical, semiprofessional and professional occupations. The changing and shifting patterns of employment turn with such kaleidoscopic rapidity as to create a "disaster gap" between those of our citizens enjoying advanced training and those with little education. The urgent need is for a preparation of young people who may enter the labor market alert to change and adaptable to new developments. The obvious need is that we educate our youth to assume responsibilities as productive citizens capable of pursuing worthy employment of social value.

Traditionally, and due to the demand for trained technicians and specialists, junior colleges have prepared highly structured programs of vocational education. For instance, pressures which were brought about by industry gradually led the junior colleges to offer specialization in the structure of technology programs; similar developments appear in business education curriculums as well. In the extreme, certain detriments accrue to the entering junior college students who face this structuring. Many programs—electronics technology, for example—are patterned or designed for a select grouping of students whose high school programs project exacting prerequisites. The entering freshman cannot always be expected to have a clear picture of his vocational outlook. Where the original choice does not prove to be the one of continuing interest to him a narrow curricular structure limits his alternatives. Where the course content tends to exceed a student's capacity to pursue the rigors of a discipline a second choice may serve as an alternative course of action for the student. Without this, motivation and progress may be thwarted; discouragement and dropout may result.

Alert curriculum planners in those institutions providing highly specialized programs will begin devising two-track curriculums as base programs become highly selective. Programs designed to educate "engineering technicians" in depth will be paralleled by programs to prepare highly skilled "industrial technicians." Both will emphasize related fields, such as mathematics and sciences, and both will include in their curricular patterns the necessary general education experiences to provide balance. Nonetheless, it remains that a greater depth of preparation in mathematics and science is required for engineering technician students than for industrial technician students, and the rigor of most of the courses in the major technical speciality is greater for the former than for the latter.
But choice and pursuit according to interest and ability are protected. Carefully prepared counseling and guidance efforts offered by professionals intimately acquainted with the sensitive balance between the two "tracks" protect students' progress.

The multi-optional concept will direct entering students through a common core of related studies and experiences leading them to specializations as their training advances. It will allow their teachers to explore with them specialized pursuits that are meaningful. Eventually, and as the institution grows in stature and enrollment, highly specialized and rigorous offerings may develop out of one or more of the options offered.

IV. Counseling and Guidance -- A New Model

Philosophy -- The goal of the Golden West College counseling program is to help develop self-directed individuals who are responsible for their own actions and decisions. Effective counseling requires frequent contacts between the students who need assistance and their faculty advisers or counselors who are professionally trained and competent to provide this assistance. At Golden West College, the faculty advisers and a professional counseling staff are prepared to help students formulate and implement realistic and intelligent educational plans.

Each entering student is assigned to a faculty adviser within a division on the basis of his declared major interest. Students interested primarily in foreign languages, for example, would be assigned an adviser within the Communications Division. A division counselor also is available to provide assistance to students with special concerns which may be encountered in fulfilling their educational goals.

All students are expected to take advantage of the services of the division adviser and counselor as they go about planning their programs. A group session will be held at the beginning of each semester to acquaint entering students with these services.

An Educational Planning Guide supplements the groups meeting by guiding new students through a thorough and comprehensive decision-making process concerning career and educational planning.

The Role of the Faculty Adviser -- All students entering Golden West College are assigned to a faculty adviser in their major field. Therefore, each member of the instructional staff serves as an adviser to a limited number of students. These students are assigned on the basis of their declared educational plans at the time of registration.
The adviser serves as the liaison between the student and the college. In this role as the central contact person, the adviser will:

1. Act in the referral of students to the proper channels for assistance with personal, financial, or other special concerns.

2. Conduct a group meeting of his advisees at the beginning of the semester to familiarize them with the traditions and requirements of Golden West College. At this meeting, the Educational Planning Guide will be distributed and explained.

3. Maintain regular office hours for advisement purposes and engage actively with his advisees in the decision-making process.

4. Maintain an up-to-date file for each advisee including test data, biographical information, high school and college transcripts, etc.

5. Interpret test information to students, when necessary.

6. Provide accurate and current career information in his academic specialty.

7. Meet with each of his advisees at mid-semester who have fallen below a 1.5 grade point average. For those students, all mid-semester grades will be distributed by advisers.

8. Meet with each adviser prior to December 12 for a final review of the work performed in the Educational Planning Guide and to issue a permit to register for the spring semester.

The adviser's role is one of aiding students in the decision-making process, assisting them in examining alternative courses of action, including advantages, limitations, and consequences of various courses of action. The final decision, however, is the student's responsibility.

The Role of the Division Counselor -- Each division counselor will:

1. Prepare, distribute and interpret educational information, including the use of test results in advising students.

2. Work with faculty advisers in the identification of students requiring professional counseling.
3. Provide personal counseling for students with special needs.

4. Assume the leadership within their divisions in working with students on probation or who are facing suspension.

5. Develop with the division chairmen a comprehensive system of research and evaluation.

6. Be involved in division meetings and participate in curriculum development.

7. Assume leadership in referring students with special problems to community agencies.

8. Maintain regular office hours to assist advisers and counsel students with special problems.

The Role of the Division Chairman -- Since division counselors operate basically in a staff (or resource) capacity, the line (or administrative) responsibility of the division chairman is important to the success of the counseling and guidance program.

Division chairmen will:

1. Coordinate the efforts of counselors and advisers thus enabling them to achieve the total objectives of Golden West College.

2. Be assigned a reduced load of advisees.

3. Advise students whose advisers are not readily available to discuss matters of immediate concern.

V. Community Involvement

Undoubtedly the most crucial frontier today lies in the realm of man's relation to man. All over the world, and at one and the same moment, Neolithic men, feudal men, agrarian, industrial and space age men are carving out new nations, or developing old ones into modern, urban, technologically based societies.

Such a time of change and confusion demands that our youth experience the real problems and tasks of modern society, and learn to explore intensively and continuously their own roles as individuals. Youth must be helped to confront and cope with the realities of their own life span.
There is need to expand horizons beyond the campus. For it is this kind of matrix that they shape their own identity and character and become either positive constructive citizens or self-indulging, non-involved individuals.

One approach is cooperative work experiences, another is to become enmeshed in a subculture, and still another is the use of the community as a laboratory experience while at the same time making direct contributions to its welfare.

Golden West College is moving forward along all of these avenues with several significant developments.

In cooperation with the Orange County Department of Social Welfare, a two-year program has been formulated to train a person for work as a welfare assistant in private and public agencies. It will be offered for the first time in the fall of 1967, and is believed to be the first training of its kind in junior college social science definitely tied to an occupation at the end of two years.

For years caseworkers have been hamstrung by the amount of time spent on routine jobs and paperwork. In a number of areas this situation is being remedied by establishing a sub-professional position of welfare assistant, a position somewhere between a clerical worker and caseworker.

Required subject matter for prospective applicants will include two semesters of English, psychology, sociology, four semesters of English, psychology, sociology, four semesters of secretarial courses, and a single semester of mathematics, philosophy, and economics.

High priority in elective subjects will be given to such specific areas as social problems of the aged, basic interviewing techniques and principles, real and personal property, conversational Spanish, and physiological-biological determinants to behavior.

The job of the assistant, as spelled out by the Orange County department, involves interviewing, handling correspondence, making reports and keeping records, helping clients find information about banks, insurance and legal aid, and accompanying clients.

Case decisions and their consequence will remain with the caseworker. The assistant is an aide, but his help will permit the caseworker to give more time to direct services for which he has been trained.
During the first semester 14 students in psychology served as professional assistants six to ten hours a week at Fairview State Hospital in Costa Mesa, working with mentally handicapped children. They performed duties in connection with research projects being conducted by staff psychologists. For the first time freshman psychology students had an opportunity to match theory and practice, an opportunity generally reserved for graduate level work.

In an American heritage course, a concerted effort is being made to involve the student-citizen in the intricacies of Orange County government through face-to-face encounters with the chairman of the Board of Supervisors, county assessor, state senator, welfare director, and personnel director. The objective is more than a rehash of civics or clipping current events from the newspaper. The purpose is to help students become informed participants.

This, then, is the story of a new college's first, faltering steps "Toward Innovation." No institution could hope for more constant and encouraging backing -- on a practical and even costly level -- than the Board of Trustees and administration of the Orange Coast Junior College District have provided Golden West College. This unconditional support, vision, and tolerance of mistakes, are the greatest possible stimuli to future pioneering.

Looking ahead, Golden West College is planning a number of additional innovations.

1. A Learning Resources Center in which we can think and work comfortably with coaxial cable and audio linkage systems, "random access reservoirs," new centralized distribution facilities, graphic services, and communication production centers.

2. "Project Able" (Applied Business Lab Experience) -- a live retail store located off campus to provide an in-depth field experience for second-year students in the business division, which will reinforce classroom theory in all business areas.

3. A computer laboratory to be tied in to the UC Irvine computer center by leased telephone line which make stored information available to Golden West College students in mathematics, engineering, and ultimately in a number of the sciences. Students will be able to initiate a "conversation" with the computer on an individual basis.

5. Telephone jacks and amplification in business and science classrooms so that instructors can carry on pre-arranged interviews with authorities in various parts of the country.

6. A combination course of American history and English, designed initially for gifted students, but broadened and improved, if successful, for terminal students.

End