The author stresses the benefits of utilizing computer information in career planning at the community college level. He cites Tondow's rationale for computer use: (1) exponential increase in information; (2) exponential increase in dissemination capabilities; and (3) accelerated curve of change. Computers should never supplant the counselor; rather, they should be used as impartial tools to aid him/her in the increasingly complex process of career counseling. Informational opportunities for counselors continue to expand as federal, state and county governments increase their efforts to develop coordinated, comprehensive and regularly up-dated systems. The document provides descriptions of 30 computer-based career counseling systems, as well as specific career counseling model references. (Author/NWS)
COMMUNITY COLLEGE

CAREER COUNSELING

AND COMPUTER USE

NOVEMBER 1976

JIM NORRIS

EL CAMINO COLLEGE

VIA TORRANCE, CA. 90506
## COMMUNITY COLLEGE CAREER COUNSELING
### AND COMPUTER USE

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I  INTRODUCTION

Without suggestion for definite implementation, the following is generally informational and loaded with personal bias.

A 5/76 review of ERIC/CIJE furnished by LANCERS (L.A. County Schools) using community college (CC) career counseling and computer use as descriptors, plus discussion with El Camino College (ECC) staff led to the following mail/phone and/or personal contacts:

Note: System description is provided in Section VI

CALIFORNIA

CABRILLO COLLEGE - SALLY DOUGLAS
California Educational Computing Consortium

COAST CC - BOB SCHAULIS/TOM GRIPP
DISCOVER/Cable T.V./Multiple CRT

DELTA CC - MR. JENSEN
CAI

DIABLO VALLEY CC - JIM STUBBLEFIELD
EUREKA/Curriculum check

CSU FRESNO - PETER GENA/R.C. ADAMS
Computer Generated Music/CAR

GAVILAN CC - HERB PECKHAM
CISC/No. Cal. CC Computer Consortium

MODESTO CC - DAN BOYD
CAI

PASADENA CC - FRANK YETT
SIGI

CSU SACRAMENTO - ROBERT SCHOOLING/VICKI MIKESELL
CAR/Counseling

CSU SAN FRANCISCO - PHIL SHONER
MAP - Social Science Major Assessment Profile

SAN FRANCISCO CC
CAOS

SIERRA CC - BRUCE BROADWELL
CAI
STANFORD U
ERIC

UC IRVINE - AL BORK/CYNTHIA JOHNSON
CAI/SIGI LINK

UCLA - KEN COLBY
Psychiatric Assessment

UCSF - DR. STARKWEATHER
Health Applications

U OF PACIFIC - HANS WAGNER
Housekeeping

USC - ED MATVELD
Machine Records

VICTOR VALLEY - MILT DANIELSON
VVCVM

CASBO - BOB KESSLER - BELLFLOWER USD
Data Processing Subgroup

CCC CHANCELLORS OFFICE - BILL MORRIS
CCJCA
Cal. State Dept. of Ed.

CAL. STATE U AND C - KEN CURETON
COLA - BOB EBOW - L.A. CITY USD

HUNTINGTON BEACH HIGH SCHOOLS - MR. MONA
Career Ed.

PALO ALTO USD - BARBARA VARENHORST
Scheduling/CAI/Decision Making

SANTA CLARA CO. SCHOOLS - ANNE MARIE YUROF
RECAP

Twenty ± (2/76) California CC have terminals. Further information on California CC computer capabilities and facilities is available from Bob Fedrick, ECC Business Ed. (203)532-3670.
UNITED STATES

BOARD OF ED. OF BALTIMORE, MD. - G.L. MASEMORE
Data Base Approach to Pupil Info System

GENESEE INTERMEDIATE SCHOOL DIST, FLINT MICHIGAN-
ALVA MALLOY, JR.
ECES

MINNESOTA ED. COMPUTER CONSORTIUM - WM. BAWLEY
Impact of Computer

THE SCHOOL DISTRICT OF PHILADELPHIA -
GARY BROOKSTEIN
VICS

PORTLAND OREGON PUBLIC SCHOOLS - GARY TOBEY
Computer Management Support System

ARIZONA STATE, TEMPE - WM. CHURCHILL
Assoc. For Ed. Data Systems
1976 Convention Summary

BOSTON U - ANTON LAHNSTON

BYU - BOB SPENCER
Registration/CAI/Counseling

CECIL CC - NORTH E., MARYLAND - DR. O'CONNERS
Telephone Network/Problem Solving

CENTRAL NEBRASKA TECH. C., HASTINGS, NEBRASKA
CRT/Open Enrollment

COLUMBIA U
ECES Development

DARTMOUTH - DARTMOUTH PLAN CONSULTANTS -
RHODA BURUCHE
Course Selection/Curriculum

DELAWARE CO. CC, WILMINGTON, DELAWARE
VICS

EVERGREEN ST. C, OLYMPIA, WASHINGTON

GLENDALE CC, SCOTTSDALE, ARIZONA
ANGELA LASK/VERN GUYMON

WM. R. HARPER CC, PALATINE, ILLINOIS - FRED VAISIL
CRT/Career
HARVARD
CAI/Invitational Conf.

ILLINOIS ST. U.
SIGI

JOHNSON CO. CC - OVERLAND PARK, KANSAS -
ED WILLIAMS
ACT/Nursing/Research Applications

LAKE CITY CC - LAKE CITY, FLORIDA
Creativity Center Consortium

MERCER CO. CC, TRENTON, NEW JERSEY
SIGI

MOTT CC, FLINT, MICHIGAN - NANCY TYLER
ECES

NEW JERSEY INSTITUTE OF TECH, NEWARK, NEW JERSEY-
MURRAY TUROFF
Computer Conferencing/Tutoring Handicapped

NE LOUISIANA U, MONROE - JOHN KAPP

NEW YORK CITY CC - RICHARD ALFRED

NO. ILLINOIS U - DE KALB - JOANN HARRIS/
DAVID TIEDEMANN
ERIC/Computer and Guidance Theory

OAKLAND CC, BLOOMFIELD HILLS, MICHIGAN -
BETTY SETZ
PEP/Cognitive Style Mapping

OREGON STATE U, CORVALLIS, OREGON
CDC Cyber 73, 250 Terminals

PENN STATE U, UNIVERSITY PARK - JOSEPH IMPELLITTERI
CDIS

PRINCETON
ERIC/ETS/SIGI

U OF GEORGIA, ATHENS, GEORGIA - FRANK GILLESPIE
CAI/Library

U OF ILLINOIS
PLATO - CAI Language

U OF IOWA - IOWA CITY - ED ENGLISH
ACT IV
U OF MICHIGAN - ANN ARBOR, MICHIGAN
ERIC

U OF NEW YORK - UPSULA, NEW YORK - ROXANNE HILTZ
Social Implication

U OF OREGON
OIAS

U OF PITTSBURGH - PATRICK PENLAND
Communication Theory

U OF TENNESSEE
Registration System (360)

U OF TEXAS, AUSTIN, TEXAS - DON VELDMAN
Counseling Assessment

U OF WISCONSIN - ROGER LAMBERT
Wisc. Occ. Info. System

WASHINGTON U, ST. LOUIS, MISSOURI - ELI ROBBINS

WEST MARYLAND C, WESTMINSTER - JOANN BOWLSBEY
DISCOVER

CANADA

MOUNT ROYAL C, CALGARY, CANADA - BARNEY DEMICELL

SIMON FRASER U, VANCAYVER CANADA

BUSINESS - Contacts not listed are provided in System Description - Part VI

ACT ED. PROGRAMS AND SERVICES, IOWA CITY, IOWA

AM. INST. FOR RESEARCH (AIR) PALO ALTO, CA. - JAMES DUNN

AM. ED. DATA SYSTEMS - PORTLAND OREGON

AM. ED. SCIENCES ASSOC., BLOOMFIELD HILLS, MICHIGAN - MARION KONAT

RUSSELL CASSELL, CHULA VISTA, CA.

CAREER INFO. SYS., U. OF OREGON, EUGENE OREGON
COMPUTATION PLANNING, INC., BETHESDA, MARYLAND
DEK
ETS
HEWLETT - PACKARD - ED. USER SERVICES
HUMAN ENGINEERING LAB. INC., BOSTON, MASS.
INST. FOR THE STUDY OF HUMAN KNOWLEDGE,
LOS ALTOS, CA. - ROBERT ORNSTEIN
IBM
NAT. CEN. FOR HUMAN POTENTIAL, EVANSTON, ILLINOIS
N.W. REGIONAL ED. LAB., PORTLAND, OREGON -
DUANE RICHARDSON
POLICY RES., INC., BALTIMORE, MARYLAND
PROJECT DISCOVER, WESTMINSTER, MARYLAND
RAND CORP., SANTA MONICA, CA.
SOCIETY OF ENGINEERING TECH., LOS ANGELES, CA.
TIME SHARE CORP., WEST HARTFORD, CONNECTICUT
UNITED LEARNING CORP., PALO ALTO, CA.
U.S. ARMY RESEARCH INST., WASHINGTON D.C.

OTHER
ALABAMA OCCUPATIONAL INFO. SYS. - DAVID SAWYER
GEORGIA, ADULT BASIC ED PLAN
ILLINOIS - STATE DATA BANK - MICROFICHE
NEW JERSEY, CAREER JOB INFO
WISCONSIN, INFO. SYSTEMS - ROGER LAMBERT (U. OF WISC.)

PHI DELTA KAPPA - CEDR - BLOOMINGTON, INDIANA
VETERANS AD. HOSP., SALT LAKE CITY, UTAH -
JIM JOHNSON

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* Not Germain
II MY COUNSELING PHILOSOPHY

The counselor sits in the middle of a marvelous ecological stew. Hopefully recognizing that each individual is unique and the Alan Watts "weirds" of the curve provide genetic diversity, this counselor facilitates growth. Paraphrasing Shannon¹ (1947), "The greater the freedom of choice, the greater the growth". Appropriately, in the Bicentennial Year, freedom of choice implies NO limits.

Ornstein² (1974) comments, "Look at what we forget - (have learned not to see)". Since learning is our business, it would seem we need to remove education's limits and 'learn to see' again.

Piaget's learning model requires experiential input which demands time. A life expectancy of 75 years suggest there is NO hurry for 'great'-decisions. Slowing down to see (feel) each microsecond is necessary. Our culture demands slow down training. Career choice requires personal acceptance first. Knowing myself takes time and requires FAILURE.

Each organism on the eco-circle mutually influences every other. Accepting interdependence allows time given for other than profit pursuits. "Man's adjustments to his environment are not a series of unrelated stages of development,...but an organic and integrated chain of events. Thus permanency exists only in the uninterrupted continuity of change and in the dynamic relations among all aspects of human activities. In other words, permanency without synthesis is a delusion." Gutkind³ (1974).

Our weirds allow confidence without dedication. Pursig⁴ (1974) says, "You are never dedicated to something you have complete confidence in. No one is fanatically shouting that the sun is going to rise tomorrow. They know it's going to rise tomorrow. When people are fanatically dedicated to political or religious faiths or any other kinds of dogma or goals, it's always because these dogmas or goals are in doubt."

Man's many abilities (150+Ruch) require better systems in fitting the school to the student. Recognizing and identifying individual differences, charting then matching cognitive styles, progress and follow-up feedback are easy for a computer, probably too time-consuming and complicated for any individual. A life's goal could be exploring and extending each ability area then, from
experience, choosing those to savor. Education is now so hung up in reading (academics) it overrides the left brain analog capacities. We effectively produce half-brains.

In the middle sits the counselor.

Ferlinghetti\textsuperscript{5} (1958) in Junkmans Obbligato suggests correctly, "The thinkpad makes homeboys of us all." If we were slowly seeing at home, it would be fine. My impression is we are fastly dying with education providing no relief and obvious support.

Golas\textsuperscript{6} (1974) offers, "All states of consciousness are available right now." Which states is ECC award of, into, supporting, understanding?

Dave Malcolm\textsuperscript{7} (1975) says, "Here, in summary, are my hunches...

1. There may well be many different realities, many different ways of viewing the relationship between man and not-man, some of them markedly different from what has always seemed to us to be the one and only way.

2. Despite the fact that superimposed over everyone in our western world is a heavy overlay of the WWM (white western male) view of reality, somehow something of the original indigenous reality still seems to survive underneath—and this is probably true for WOMEN as well as for BLACKS and INDIANS and CHICANOS.

3. Like the fish and water ('I don't know who first discovered water but I feel sure it wasn't a fish'), we will all remain encapsulated by some one view of reality—unless we have something to compare it with.

4. When WWM reality is compared with other realities, one towering difference that continually appears is the WWM characteristic of man seeing himself as virtually completely split off from, separated from others and from the rest of reality.

5. Unless it is somehow checked, the WWM dominated society seems to be rushing us pell mell to destruction—destroying the individual to feed the need of our complex system for interchangeable units, destroying the ecology and making changes so rapidly that the species may well be unable to survive.

6. The one sign I see that the WWM dominated society may be opening up, that we may have a chance to break out of encapsulation before destruction engulfs us is the legacy of the 60's—the movement toward cultural pluralism evidenced by Black Identity, Red Power, Women's Lib, La Raza.

7. If, through the mirror of cultural pluralism, we can come to see ourselves and to understand that our way is not the only way, perhaps—just perhaps—we can change enough in time enough to avert destruction."
Also see Altered States of Consciousness\textsuperscript{8} (1975).

The enormity of 30,000 individuals per week is heavy. Heavier for a counselor is Prather\textsuperscript{9} (1970) reflecting, "I choose to use my own mind. I do not need your mind. I want to experience you, listen to you - not to myself. I have already heard everything I have to say. You are what is novel about this conversation."

It is a copout to suggest that size limits anything. Our thinking limits everything.

"With your eyes closed back slowly toward the center of the room. As you touch others, find a back, stay for several seconds, then move on. After a few minutes of back touching, separate while you explore another person's back with your hands. Change places and repeat. Then have a back conversation. Be gentle, happy, angry, sad, affectionate. Slowly separate and open your eyes." Greer and Rubinstein\textsuperscript{10} (1972).

"It's much easier to ride the horse in the direction he's going." Erhard\textsuperscript{11} (1973).

"But innovation is more than a new method. It is a new view of the universe, as one of risk rather than of chance or of certainty. It is a new view of man's role in the universe; he creates order by taking risks. And this means that innovation, rather than being an assertion of human power, is an acceptance of human responsibility." Drucker\textsuperscript{12} (1959).

Herndon\textsuperscript{13} (1972) offers a different view:

"If you only work in order to change things, you will simply go nuts. I am an authority on it.

"No doubt. It is the original prerogative of the white American middle class to be sucking up while at the same time actually believing everything it says. Lizards can tell you all about it.

"For all the terms for special kids really just mean kids who can't or won't or don't do things the way the school thinks they ought to be done; once labeled as special, the school can pretend that there is a normal group which is well served by the custom of the school. The school's obvious inability to satisfy many children can then become natural, since the kids are 'special' and shouldn't be satisfied by any normal procedures and the school does not need to change its ways at all, has only to create some arrangements on the outskirts of the school to keep them special kids and special teachers out of the way.
"Just so. Just so the public school practices alienation on the land, and it is a practice which affects its teachers, its kids and the parents of its kids alike, some obviously more harshly than others. You may be sure you know everything about your kid, or about how you want to teach, or about yourself as a kid, but if the school tells you different you'll find that wedge driven in there between you and your child, between you and your class, between yourself as you know yourself and yourself as the school tells you about yourself.

"I have a good deal of respect for all the people involved in Tierra Firma School; they are, by and large, exactly the kinds of people that educational writers are always saying ought to be working with kids in schools. They are bright, serious, hardworking, confident, innovative, humorous, well-read, creative, with-it. They are not repressive, narrow, grade-oriented, vain, afraid, hung-up on testing, conventional, or chicken-shit. They have guts; they like and respect the kids.

"Does the school then spend time and effort teaching those kids who can't read the texts how to read the texts? Shit no, man. Why mess up a situation made to order for failure? At Spanish Main Intermediate School there are some eleven hundred students, at least half of whom can't read the books they lose and have to pay money for at the end of the year. The school hires one remedial reading teacher, who will only deal with about forty students per year. Even then, this teacher will not really teach the kids to read, but of course will review some complicated and nutty system which (again) some of the remedial reading students already know (although they can't read) and the others don't, for the remedial reading class is part of the school too. Well of course the school says it ain't got money enough for all them remedial reading teachers, otherwise it would love to teach everyone to read. But it does have money enough for a million social studies teachers to teach Egypt to groups of kids,

"The school's purpose is not teaching. The school's purpose is to separate sheep from goats. You can find a very good school with lots of grass where the teachers don't yell at you. It separates. By all means send your kid there.

"Change! An institution can only be changed in the same way that a mountain is changed by highway engineers into a pile of dust. No institution, once invented, has ever ceased to exist. Nor has any institution ever changed, except according to the exigencies of time as above. Not changed, only adapted. Its fundamental
purpose remains, namely to provide a place to do things where these things won't be done.

"Resist the urge to talk and discuss, resist the urge to watch the kids all happily working in the workbooks and programmed materials, resist the urge to motivate and to teach something to everyone at the same time, resist the urge to measure one person against another or everyone against any standard; resist every day all the apparatus of the school which was created in order to enable you to manage and evaluate a group, since it is just that management which destroyed the kids you have in your class."

Here, again, sits the counselor.

Counseling suggests an active support system that extends each of us. Since we are all counselors to someone, a campus-wide integrative staff network encouraging support and self-growth is possible. Continuing in-service, feedback, and communication would be a must.

Brown, et al (1976) in describing confluent education says, "The good society is one that promotes, or at least does not thwart, the development of distinctively human capacities and nourishing interpersonal contact.

"Strongly influenced by existential psychology, Gestalt in particular, the values of confluent education derive from the basic premises that human beings are capable of a continual process of actualizing their uniquely human potential—physical, mental, emotional, and transcendent—and human beings can and should, as much as is possible, define the world for themselves—make their own meanings."

This suggest a wider base for counseling and demands change toward individual growth. (Goal vs fact orientation).

Assemblyman John Vasconcellos in a Los Angeles Times 11/9/76 article best expresses this. "As a group, we Americans are ready, even hungry, for fare much more forthright and substantial from our candidates and office-holders. Jerry Ford and Jimmy Carter simply didn't recognize our expanded consciousnesses. They weren't nearly willing enough to trust either themselves or us.

"Neither candidate seemed aware of the most significant force in American culture during the past 15 years; the humanity revolution. I don't mean just the campus
and ghetto violence of the 1960s; I mean the far more pervasive and profound revolution that has manifested itself in these ways:
- The various liberation movements; black, brown, women's, gay, gray and children's. Each is a powerful search for, and statement of, personal identity (that it's OK to be who I am).
- The human potential movement: sensitivity, encounter and spiritual. Each is a powerful search for ways to become more of who we are as people.
- The sexual revolution which, despite its sometimes bizarre expression, is a powerful statement of desire to own, inhabit and experience our bodies more freely and fully.
- The drug epidemic which, despite its sometimes self-destructive forms, is a powerful statement of desire to experience our energy and feelings more completely.

Each of these developments is significant in and of itself. Together, they represent something profound that is happening in our society: People of all races, incomes and ideologies (from redneck to radical) are saying there is far more to us as human beings than we have heretofore been led to believe.

"The unrecognized result of all this is that we are out-growing our traditional concept of what it means to be human. Similarly, we are moving beyond our social institutions, insofar as their design and function is based on those earlier - less complete - perceptions of humanity."

Any contact is therapeutic. Education, in holding to a historical belief that only psychiatrists "can do" therapy, loudly proclaims its age and lack of utility. Worse, it limits staff thinking. What are staff-student contacts? Cotton encased?

It is said, "higher education is in for troubled times." The counselor in her/his daily contacts just as the instructor in his/her experiences that exhilarating feeling of sharing as growth occurs. Troubles seem small.

Counselors sit uniquely between all campus activities as a student/staff (people) advocate. This fisheye view of the campus community presents uncommon relating problems as counselors try to relate to the various autonomous compartments.

It is both necessary and frustrating to question a system that deals in learning/communication and growth, yet shows so little expertise in its own internal communications and growth.
PHILOSOPHY - REFERENCES

13. Herndon, James, How to Survive in Your Native Land, Bantam, 1972 (pb).
**III CURRENT PRESSURES**

Influencing future ECC career ed and/or computer decisions will be some of the following (not intended to be all inclusive or priority ordered):

**Experimental Colleges**
Longsworth (1976)

**Experiential Learning**
- "The purpose of the CAEL project is to develop appropriate concepts, methods, procedures, techniques, and instruments for the assessment of experiential learning and to validate such ideas, processes, and materials through large scale tryout on many college campuses." CAEL Project Status Report 3/76.
- walkabout (1976).

**Innovative Programs**

**Special Group Advocacy**
Sexuality, women, gay, adult, community ed, seniors, singles, part-time, disabled, minorities, ASC, peer-counseling, Anti-electroshock, tax revolt, etc.

**Changing Life Style**
- Sound, Movement, and the Healing Arts, UCSD 7/17/76 Workshop
- UCLA Extension Catalog, EST, Yoga, TM, natural foods, 'move to the country', country music, birth rate decline, divorce %, no marriage marriage, etc.

**Technical Changes**
- Computer use in medicine, Computer, 1/75 issue
- Microprocessing developments
  - TRW silicon chip/holographic memory
  - Mini/portable computer
- Cable TV/Satellite
- Phone/video shopping

**Brain/Learning Researching**
- Hunter (1976)
- The Psychology of Consciousness, UCSF 5/8/76 Symposium
- Educating Both Halves of the Brain, UCB 7/24/76 Conference
- "For all practical purposes, therefore, most commonly used batteries of creativity tests measure cognitive abilities that are not reliably distinguishable from intelligence; this fact undoubtedly accounts, in part, for their positive correlation with academic achievement. Hence it is grossly misleading to distinguish on the basis of such tests between creative and intelligent individuals." How Children Learn6 - Symposium (1967).

Social Issues
- Ethnomethodologist Garfinkel shows motivation is not what it seems. Tyler7 (1974).
- Putting students closer together doesn't make them better students. Baron9 (1975). Education gives too little attention to space design.
- Graduating seniors of LAUSD from minority areas are not entering college even when eligible. Bridge the Gap 10 (1976).
- Federal participation will increase. Is not counseling or systems oriented with evaluation and feedback.
"Because of lengthening life expectancy and a national birthrate barely at replacement level, the median age of the U.S. population is expected to jump by six years (to 34.8) over the next few decades. The population aged 75 and older will grow at 2.5 times the rate of the population as a whole."
- Education news is everywhere - generally sensational, undocumented, incomplete and out of context (even when released by educators).

Educational Changes
- "When resources were plentiful, any poor management that may have reduced the efficiency of the higher education enterprise had only slight impact on the effectiveness of what was a growing and dynamic system. In the future, however, institutions ineptly managed and burdened by deadwood - in the form of people, programs, or facilities - will be unable to maintain their vitality.

"It seems clear that if fiscal planning does not reach beyond the state's annual or biennial budget cycle, then academic planning must do so." Bowen13 (1976).
"The most thoroughly discussed - and agreed upon -
topic of the conference was the need for high school
students to encounter a broader range of people
and experiences. Commission members unanimously
recommended that work and community experience be
integrated into the high school curriculum." "
Dulany and Quattrone (1975).

"Students are maturing as much as two and one-half
years earlier than they did 100 years ago and
achieve their legal majority earlier as well.
Education is becoming a practice recurrent through-
out people's lives rather than limited to their
public school years.

"Regular training and experience in selecting, de-
signing, implementing, and managing their own
learning will enable students to become independent
and will prepare them for a lifetime of self-ed-
ucation.

"Education is a lifelong, continuous process pro-
viding the experiences, environments, relationships,
challenges, and guidance individuals need to max-
imize their opportunities for growth in each period
of personal transformation, to prepare for the
changes demanded by each period of transition;
and to cultivate the ability to negotiate the de-
mands of changing circumstances in the society in
which they live...The purpose of education is to
assist individuals to create a learning life-style
with a developmental perspective based upon the
discovery and continuing refinement of each person's
unique capacity for personal growth, relationships
with others, and functional competence...To cul-
tivate transformations and prepare adolescents for
transitions and societal change, learning situations
should give full attention to personal and inter-
personal as well as academic content. The treatment
of content in each domain should be as concerned
with intense firsthand experiences and challenging
productive activities as with relevant theoretical
studies.

"To enable students to discover and develop their
particular abilities into performative competencies,
the range of recognized accomplishment should be
greatly extended by providing options within the
program, by establishing a field options committee
to grant credit for any worthwhile learning exper-
ience outside the program, and by establishing an
academic options committee to offer more structured
learning opportunities within the program. Evalua-
tion can be conducted by measuring each student's
accomplishment against a baseline performance in the activity in an appropriate manner.

"Many innovations have been recommended in recent years, many attempts at implementation have been conducted, and many adoptions have been announced. But the programs of the mass of secondary schools have changed little. There is no apparent structure or strategy for accomplishing major changes presently operating which can be employed to implement new programs or settings such as secondary levels and its support system." The New Secondary Ed 15 (1976), PDK Task Force Proposal.

"'Thus, the data clearly suggest the tendency for lower-scoring students not to complete the first year of college.'

"The Rever-Kojaku report points out 'the implication is that the emphasis on increased accessibility to college, which may have been successful as evidenced by lower average test scores of entrants, was not matched by the provision of programs and environments compatible with the needs of 'new' students.

"'Perhaps', the explain, 'if more new students were able to participate in special support programs, they would remain in college.'"

"The rise in average first semester college grade point average (GPA) at schools studied in the report was even more pronounced than it was for HSA.

"'Over the six-year span the increase in GPA for the sample of colleges included in the study varies from .3 to .9 (and) the results for 1966-67 show that the colleges' average was usually at least .2 less than the HSA for students at the same school. By 1972-73, the average college GPA was much closer to HSA reported by the same students'". Activity16 (1975).

- UC and CSU and C enrollment drop. UC first in 18 years, CSU first in 15 years (1976). (Legislative fiscal pressure?)
- Californiastest for HS graduation
- "Students reported that their academic counseling at the community college was not adequate and that courses they took at the community college did not prepare them for the university. This was...the perception of those undecided (about) majors.

"(Students said) the assignments for work outside of class at the university were more demanding than the students had previously experienced...Professors were not concerned over the fact that they were having difficulty..." Wattenberger17 (1976).
"Most college freshmen in 1975 felt their high school preparation left a lot to be desired, according to a survey conducted for the Cooperative Institutional Research Program. Barely one in five of this year's freshmen were satisfied with training in art and music, and only 17% were confident in their vocational skills, according to Education Daily. Eight out of 10 said they came to college without good study habits." *Kappan* (1976).


"Career planning is a whole life process: Full employment is a dream; it will never happen, and the percent of unemployment will increase. Economists agree that the work week won't shorten, therefore not everybody will work.

"Why college? Students are in College because they have a need. Do we recognize that need? A single contact with one person has no effect, except it be traumatic or climatic. Effect occurs over a long period of contact. Ask yourself at the end of the day who you affected. (It's scary isn't it?)

"Decision making skills: The opportunities available to students today are fantastic. People entering the world of work today will be there until 2030. By 1980, only 20% of the jobs will require a college education. But 50% of our people go to college. Who can predict 2030?

"Our society is changing from White Collar to Service occupations. There will be little chance for status climbing. The Government will become an even bigger employer. It is the biggest now with 1 in 6 working for the Government. One in three new jobs will be in the Government. There will be little change in working hours. Of Government employees, 70% are clerical jobs. The small employer continues to be squeezed out.

"The supply of over-qualified people will continue to grow. There are not enough jobs to go around. Women want a piece of the action. The current high school equivalency test is the first step toward a competency based education.

"Evidence of good interpersonal relations is the best predictor of later success. Good mental health is ability to handle life's problems." *Mitchell* (1976).

*Educational Studies* - California: *Postsecondary Alternatives to Meet the Educational Needs of California's Adults. Legislative
Feasibility Report #432, 9/75.
- Iowa: The Third Century - Post Secondary Planning for the Nontraditional Learner. Bruce Hamilton - Office of New Degree Programs 5/76.

Legal
Negotiated contracts may require many changes. Paternalism will end.

Testing
- "Our dependence upon test scores verges upon a national mania. This dependence is matched sadly by our general lack of information about the tests we rely upon, by the damaging misuse we normally make of test scores and by our quaint faith in test specialists (who sometimes seem to be the only ones to voice a healthy and informed scepticism about tests)." White (1976).
- "Mercer (UC Riverside) concluded that 100% more blacks and 300% more Mexican-Americans were labeled retarded by community agencies than would be expected from their proportion in the general population; only half as many Anglo-Americans were so classified." Kappan (1976).
- "A third conclusion would suggest that the description or characterization of any person should be made in terms of a profile of his various mental abilities. Recent research suggests that the profile would probably need to be tridimensional so that the motivation, products, and expressions illustrating the variety of interpretations might be adequately represented. We have heard the statement, 'He looks at the person and he is reading him.' This is not a conventional description of the reading process but it is perhaps analogous to a type of human ability which is quite different than the comprehension of verbal abstraction either measured on a reading or abstract verbal intelligence test." Harsh (1960).
- Declining ACT/SAT scores. Final evaluation is not in. The following offer a perspective to a complicated issue which is overblown.
  Kappan Newsnotes 3/76
  ACTivity Issue 2/76
  ACT Research Reports #71 2/76, #70 1/76
  NIE Information Fall '75

ECC Research
While statistical summaries are timely and readable, they have not been related to institutional goals. (This is possibly not the present defined function of the Office of Research even though an Instruc-
tional Goals Inventory was completed in 1972.)

Without a time and goal frame, statistics tend to be just numbers.

Consideration of societal factors with possible prescription would be helpful for counseling.
PRESSURES - REFERENCES


22. Kappan, 5/76.

Career choice should lead to interim life goals that allow success and growth. There should be NO hurry, forced choice, or imposition of our (educations) values.

Most CC career education proposals/centers I have seen are cosmetic compendium expediences developed because there is money available. "Long before Francis Bacon declared that knowledge is power, schools and lack of schools were directing students into occupational/social slots for their adult years and indoctrinating them into approved political, economic, and religious ideologies for fear that otherwise the social structure would collapse." McKennon (1976).

Ignoring what we know about learning theory - Piaget's first step: "An individual is not meaningfully able to deal on a formal level with any topic without first acquiring a sound experiential base, i.e., without being able to classify and to serially order the phenomena under consideration." Lawson and Renner (1976). Also see Neural Mechanisms of Learning and Memory (1975).

We jump to decision making - "Pick a career" - without determining the individuals experience base. Adding to the counselors woes, there is seldom any evaluation of readiness, abilities, self image, or available integrated growth support. Longitudinal follow-up is non-existent.

Many inventories presently used are biased and particular care should be exercised in their use with minorities. See Hawley (1976).

Conceptual models of career development are readily available. Ryan (1973) presented an excellent form that is not counseling oriented but nevertheless, an easy first step involving systematic logic. Ron Smith's (Cerritos CC, Norwalk, Ca.) 1974 Workbook for Inservice Workshops in Vocation Guidance Modeling is again an excellent example. Here, a process of step by step needs assessment, goal setting, implementation, evaluation, and feedback is described. Few Career Centers follow this model.

The Marin Regional Occupation Program Publication Career Ed Model K-14 describes a good counseling-oriented program.

The Johnson O'Connor Research Foundation - Human Engineering Lab in Boston has, for years, offered clues to
career choice and aptitude relationships.

Informational opportunities are expanding with federal, state, county, state college, etc. developing feedback that tends to be much more cyclopedic, coordinated, comprehensive, and regularly updated.

The efficient use of such data NOW requires compatible computer access via terminal. ECC cannot use multi-terminal systems with its present core configuration.

A BA no longer guarantees employment or a reasonable salary. Further success in school is not related to outside success. "Put simply, the research by Holland, Richards, Hoyt, and their colleagues seems to demonstrate that success in school work is not related to success outside of school. Further it implies that academic talent may be only one kind of talent, and of limited consequence in the real world. Whether or not the talents evidenced in nonacademic high school accomplishments are related to comparable non-academic adult accomplishments, however, has not been determined, and is the subject of this report." Munday and Davis\(^6\) (1974).

In addition, college acceptance of experiential credit and non-traditional learning present new pressure. Note CSCDH Humanities External Degree Program ad in Todays Education 11/1976.

"According to Jerry Miller, director of ACE's Office of Educational Credit, 'It is pressing all academic institutions to focus more on the outcomes of courses - what competencies students have when they complete them - and less on the content of courses - what professors attempt to put in them'." Radloff\(^7\) (1975).

Many Educational Research Centers have provided volumes of career ed background. Particularly helpful to CC's is ACT's Research Reports which are generally nationwide in scope. Suggest future research directions, and relate findings to college use.

Northwest Regional Ed Lab has developed an Experience-Based Career Ed (EBCE) Program for high school use. Some aspects are included in ECC's Career Coop Ed but certainly not the counseling portion. Skyline Career Dev. Cen. in Dallas uses 250 CRT's in an airplane hanger to "provide the maximum educational opportunities for career training to all the people in our district". PDK News Notes and Quotes 5/1976.

ECC is presently offering the Strong/Campbell, COPS, Hollands SDS, and Purdue English Inventories through the Career and Counseling Centers. Presently, there is no
school commitment to experiential replacement, following counseling. Our Lifestyle Courses, likewise, have no experiential placement. See Demicell (1976).

Work my not now (and possible never did) provide the happiness - fantasies generally credited to it.

Education must accept that there are many personal, community, family, financial factors that have more immediacy for students. Again, an interdisciplinary eclectic approach is needed.

"In my work as a clinical psychologist, I have encountered a growing number of persons whose resistance to work for the completion of work is so massive it immobilizes them. An effort to understand the dynamics operating in these persons has produced some tentative hunches about the meaning of work to them. There seem to be at least three types of resistance to work, and also, three stages individuals go through as they struggle with efforts to begin tasks and to stay with them to completion...loneliness...rebellion...threat to autonomy...

"Counselors working with students who claim they cannot work need to explore the dynamics of the experience before proposing methods of intervention.

"Factors to consider include:

1. Energy level - Work requires energy and the individual may have a low energy level from fatigue or depression.
2. Rebellion - The passive-aggressive behavior of the student needs to be understood.
3. Ego structure - If the student fears loss of autonomy or absorption by another, he may need some help in this area before he can accept the challenge to 'get to work.'
4. Pessimism or powerlessness - 'Nothing I can do will make a difference anyway.'
5. Maturity/Immaturity - The individual may not be ready to give up short term gratifications.
6. Loneliness - If the person has some resistance to the loneliness of work, they may need help in identifying alternative ways they could deal with this problem.

"Most of the above problems go beyond the difficulties the individual is experiencing in the area of work itself. The resistance to work is felt as a painful symptom. When the person is enabled to get on with work, the relief becomes evident in many areas of the person's life." Pretzel (1975).

Career Ed theory is probably best utilized by ACT. With
their addition of cognitive style and computer use, it is very attractive.
CAREER ED REFERENCES


V GENERAL SYSTEMS PLANNING (ANA-SYNTHESIS)

Any proposal for change must fit somewhere. With ECC's size, planning should mandate a goal-oriented ECO model with a time frame evaluated at stated intervals. The following give good advice in systems development:

- "For example, what evidence of fundamental human concern for the value system of the individual applicant is found on the company's employment application form?" Austin¹ (1975).

- Also see Perley and Martin² (1975) and Muhich³ (1973). General systems theory review with peer counseling emphasis applied to schools.

- Steiner⁴ presents strategic planning with a changing environment in mind. Business oriented - what school isn't?

- Training for Change - Regional Conf. UCD 3/1/73 co-sponsored by WICHE. Basis was WICHE Publications:

  Above developed by Jim Banning who was a presenter.


- Handy⁶, 1967, Using PERT.


- Los Angeles County Schools Consultants are Available "assessment of educational needs, establishment of instructional objectives, planning the instructional and management components, constructing or selecting tests, gathering and analyzing data, auditing evaluation process and product, and reporting program results."

- Bob Fedrick on ECC Bus. Ed Staff DELPHI method.
SYSTEMS PLANNING REFERENCES


Harris and Tiedeman's (1974) article provides the best general background to computer use in career counseling. Of the 25-30 systems available in 1970, five remained in 1974, and few were developed for community college use.

Tondow (1970) lists the rationale for computer use:
1. Exponential increase in information
2. Exponential increase in dissemination capabilities
3. Accelerated curve of change

One could add all humans have too many abilities for any one person to remember - attempting then to place in categories or match others or match curriculums to them is a very large matrix. Computers (and CRT's) are impartial and don't require role playing but do not supplant the human contact of the counselor. They are a useful tool.

The November, 1970 issue of The Personnel and Guidance Journal was devoted to technology in guidance. Covered are: A Conceptual Overview, Dangers, Examples, Media Use, Privacy, Retrieval, Systems Design, etc.

An interesting application is on-line psychiatric assessment at the VA Hospital in Salt Lake City, Utah, Johnson, et al (1975). This adds a mental health dimension normally ignored by public schools.

Nationally, the Labor Department is establishing ten centers as National Occupational Information Services. The Labor Department also has available the National Longitudinal Surveys (NLS) which provide a unique set of labor force behavior and work attitudes. The NLS Handbook lists available data and public-use tapes.

Labor has also produced a listing of 25 matching personal and job characteristics of 280 common occupations. This type of matrix listing would be exhausting without a computer. School counselors are listed as:
"needing a degree; jobs are scattered, involves helping people, involves working with people, works as part of a team, directs (poor counseling word) activities of others, high level of responsibility"

Interesting is the State of Washington's Yellow Pages of Career Ed Resources:
"Arranged in the format of the Yellow Pages in the Tele-
phone book, the document will provide information on career areas ranging from Accounting to Zoology, including related career areas, what students need to know, relevant statewide interest groups and federal and state agencies, local contacts, inschool ideas, field visit ideas and priority school subjects."

State listings and a combined LA-Orange County Career/Employment listing is under development. Use of this style information is much more efficient via CRT.

The following alphabet jungle systems are briefly described. (Currency of listing is not guaranteed as vendors literature often is not dated):

- ABE DISCOVER Project Innovation
- ACT IV EBCE RECAP
- CAOS ECES Rochester Career
- CAVCS EPIC Guide Project
- CIS EUREKA SCHOLASTIC
- CISC GIS SIGI
- COIS ISLD SRA
- CPP ISVD TGISS
- CSS OIAS VICS
- CVIS PEP VVC
- PLAN VUCM

The competition between computer vendors should be noted.

ABE - Georgia Adult Basic Education, James R. LaForest\(^4\) (1973).

A complete systematic and comprehensive model utilizing educational engineering. Ryans model is used. Clear explanations and flow charting. Not specifically career-oriented but very useful in system design.

ACT IV - American College Testing Interest Inventory. Ninety items of job-related activities. (1976).

See also CPP


Used at City College of San Francisco with COPS to determine congruence of two. Little found.

CAVS - Computer Assisted Vocational Counselling System, EJ105530, Joseph G. Gallo. Canadian senior high program.
CIS - Career Information System, Bruce McKinlay, Director; 247 Hendricks Hall, U of Oregon, Eugene, Oregon 97403, (503)686-3872. Developed from OIAS using decision making, education plans, and experience tables.

"The Career Information System has been implemented on three time-sharing networks: a Hewlett-Packard 2000F (and 2000 Access) system, a DEC system-10, and a Xerox Sigma 6.

"The Hewlett-Packard version of the system is written in H-P Timeshared BASIC. The programs and files required to interact with the system require approximately 7000 blocks of disk storage. Each 2000F block is 256 16-bit words in length. Programs and files used for updating and maintaining the system require an additional 100 blocks. Seventeen blocks more may be assigned for collection of statistical information to any user sites using the system.

"The other two versions are written in FORTRAN IV and are intended to be easily transportable and modular. Machine dependent statements have been flagged. The system runs in approximately 15K, 36-bit words on the DEC system-10. The files open to the program at run time require approximately 4.2 million characters of disk storage (6500 128 word disk blocks). Programs for update and maintenance of the FORTRAN system and program segments for collection of statistical information are in development.

CIS regularly sends updated versions of programs and files to users on 1/2 inch magnetic tape produced on the Hewlett-Packard 2000F, the DEC system-10, or an IBM 360. All three forms are 9 channel tapes recorded at 800 BPI. The Hewlett-Packard tape may be loaded directly onto another 2000F.

CIS has successfully transported the system to other timesharing environments. For additional details about specific systems, please contact the CIS office."

See also CISC

CISC - Career Information System-California, Herb Peckham (408)842-8221.

CIS application to California (1976).
COIS - Computerized Occupational Information System.
Impellitteri - Penn St. Univ.

CPP - ACT's Career Planning Program.

CSS - College Selector System, Christine Doerr; Educational User Service, Hewlett-Packard, 5303 Stevens Creek Blvd., Santa Clara, Ca. 95050, (408)249-7020.

System matching student needs and interests with college data base.

"CSS is available to school users of HP 2000 systems. It provides current college information for students, parents, and guidance counselors. The college data base includes over 1700 two-and four-year colleges throughout the nation. Other two-year colleges can be added locally. Information included for each college includes course pre-requisites, geographic area, state, composition of student body, admission procedures, calendar plan, tuition, room and board fees, scholarship and loan programs, etc." (1976)

CVIS - Computerized Vocational Information System, Diann Jones; CVIS Consortium, Carroll Hall, Western Maryland College, Westminster, Md., 21157, (301)848-1113.

"developed by JoAnn Harris and colleagues at Willowbrook High School in Villa Park, Illinois, makes use of an IBM 360 or 370 computer and CRT. DVIS is a direct inquiry with monitoring system. The system has three distinct parts: the guidance system, the computer-assisted instruction system, and the administrative system. The guidance system has ten subsystems: Vocational exploration at junior high level with associated visual materials; vocational exploration at secondary school level; four-year college information and search; community college information and search; technical school information and search; apprenticeship information; military information; local job search; financial aids search; and student registration. The CVIS system is in public domain and has been broadly distributed; it is currently operational in 122 sites in the United States."

Presently in use at Charles Co.CC, La Plata Maryland with other IBM developed computer uses (instruction, CAI, student data system, budgeting and finance, property record and inventory learning resource center and library. (1976).

Contact John Sine. Also see DISCOVER.

Includes understanding values, making decisions, occupational grouping (Holland), interests and strengths, occupations to explore, occupation info, narrowing list, exploring.

"The DISCOVER program runs on an IBM 370 machine under DOS/VSE/CICS using IBM 3270 terminals with light pens. The total package consists of a computer tape containing all text, programs, and data files, technical documentation, guidance documentation (Professional Manual, student Resource Guide), audio-visual student orientation program, professional orientation slide program, posters, student handout brochures.

"The package leases for an annual fee of $8250 per driving computer, regardless of number of terminals, students, or sites served; this fee includes maintenance of the data files and the payment of royalties on Holland's Self-Directed Search which is administered on-line as a part of the system."

Inservice required. Developed from CIVS. Now being converted to CC use at Orange Coast CC, Costa Mesa, Ca., to be available early '77.

EBCE - Experience-based Carter Ed. Program, Larry Fish, NW Regional Ed Lab, 710 S.W. Second Ave., Portland Oregon, 97204, (503)248-6800.

Uses business and community agencies as learning sites in a full-time alternative program for 11th and 12th grades. In use in five NW communities and planned in 50 school districts in the U.S. (1976).

ECES- 4 - Educational Career Exploration System, Alva E. Mallory Jr., Director, Genesee Int. School District, 2413 W. Maple Ave., Flint, Michigan 48507.

"The three basic components of ECES III are 1) the computer-terminal-color microfiche reader subsystem, 2) the instructional module subsystem, and 3) the counselor-teacher-monitor subsystem...

The three component ECES III career development skills program is designed to enable students to become more effective by developing skills in:
1. Expanding career alternatives
2. Identifying career decision points
3. Identifying sources and types of information
4. Applying a systematic decision-making model
5. Analyzing a career alternative with an internship experience
6. Developing a tentative career plan

Students involved with all three components of the ECES III program will experience a series of group interactions, individual interactions with a counselor, and interaction with the computer. (1976).

Placement system (GAPS) is also used at Genesee. Approximate cost $5,000 plus microform reader, printer, data phone.

ECES 3 uses COBOL Taskmaster
ECES 4 uses COBOL CICS

Used at Mott CC, Michigan. Contact Nancy Tyler. Used for one unit credit.

EJ 075830-1972
EJ 062968-1972
ED 089150-1972
ED 065704-1972


IBM - Data Processing Division, 1133 Westchester Ave., White Plains, New York 10604.

EUREKA - Jim Stubblefield - Chm. Counseling; Diablo Valley College, Pleasant Hill, Ca., 94523.

Oregon OIAS converted to California.

"EUREKA will contain QUEST, which is a computerized vocational interest and aptitude test, a file of occupations, presently 228 which we plan to expand 59 350, programs in study and training leading to the occupations listed, and a school file which contains 105 different factors of information concerning the schools and colleges contained in the file."

Runs on HP 2000F or DEC 10. Requires 7000 disc blocks.

"It is usable on three of the Hewlett-Packard 2000 series, the HP 2000C, 2000A', and 200OF. In addition it is adaptable to the HP 3000 series.

"Containing 2.5 million bytes, the program is available to school districts or individual schools on a license basis only. Cost of the license ranges up to $9,000 for the first year, depending on the client's configuration; for subsequent years, up to 8,100 per year. The service is available either on tape or disc and can accommodate up to 32 ports.

Two paper supplements accompany the program. One is a student study guide, the other a user manual. The program is updated with new information every six months, with the updated version forwarded to clients in the same form, tape or disc, they are already using.

As part of the service under the license fee, each client receives 100 guides and 2 user manuals. Additional guides are available at a cost of $.58 each, additional manuals are purchaseable at a cost of $25.

Time Share Corporation believes one guide is sufficient for every four students in the same school and one manual can serve each school in a district.

With approximately 500 junior and senior high school on-line users, the Guidance Information System is the most widely used system of its type throughout the United States."

Time Share has many other educationally associated services.


Tiedeman's ISVD with group theory of personality added. See ISVD.

ISVD - Information System for Vocational Decisions. ED 095372-1974
David Tiedeman, Northern Illinois U., DeKalb Illinois.

In developing occupational and military information for a proposed system, Tiedeman supports:

"1) data should be collected and presented specifically to aid students in their vocational decisions; 2) data should be treated in a systematic and structured form that exploits high speed commutation; 3) ready-made sources of information should be relied upon as far as possible; 4) data should be articulated from distinct and diverse sources into a working whole; 5) datafiles and means of access to them should be prepared separate from one another so they can be used in a variety of combinations; and 6) information given by the system should be suggestive, not prescriptive."

Harris says "when you invariably insist that only each man can help himself -- i.e. that no other man can fully help another -- you begin clearing away the considerable garbage in which we surround guidance in education. A person must prove able to use a computer system by himself before he can be informed by the work of another while remaining free of the delusional system in which the work of that other is set. For instance, in order to protect another person from enslaving himself in your delusional system, you must tell him what you know, tell him why you hold the beliefs that you do, but insist that only he can fully know, that you really don't fully know. This relationship of an inquirer to facts was maintained in the ISVD by insuring that each of the system's monitoring subsystems could eventually be reprogrammed by the inquirer to become his own monitoring subsystem."

Tiedemans findings have utility for all counseling.

OIAS - Occupational Information Access System.

Bruce McKinlay, Career Info System, 247 Hendricks Hall, U of Oregon, Eugene.

"OIAS consists of five parts: a 25-question questionnaire, occupational descriptions, selected bibliographies, cassette tapes, and instructions concerning local visits. A student typically uses at least the first two parts of the system: s/he answers the questionnaire, receives a list of indicated occupations, and obtains descriptions of
those in which s/he is interested.

"The questionnair helps pinpoint occupational areas of interest to the student by asking questions concerning physical limitations, geographical preferences, education and training, aptitudes, interests, and desired earning. Several hundred job descriptions are then available to the student; each consisting of approximately 250 words and providing information on, among other things, the work environment, the work week, salary, employment outlook, special training needed, and where that training is offered. Other resources include selected bibliographies of books available in the school, a cassette tape containing recorded interviews with actual workers in the selected occupation, and directions for making contact with a local worker to arrange for a personal interview.

"The guidance system runs on an HP 2000P with either teletype or CRT terminal. The system was initially installed in Winston Churchill High School in January 1971, and within the first semester more than half of the student body had used it. To-date, more than 200,000 students accessed the system; most of them and all of their counselors are enthusiastic about it. Detailed test results on the system's implementation in Oregon are available.

"OAAS is available for a cost of $750 plus consultation fees as necessary." (1976)

Time use one-half, cost one-tenth that of personal counseling.

PEP - Personalizing Ed Programs. Betty Setz-Director, Research Administration, Oakland CC, Bloomfield hills, Michigan 48013.

"Oakland Community College has constructed a student-centered, educational program employing a variety of teaching techniques, instructional technology, and flexible time sequences to accommodate each individual's identified learning strengths and abilities. The components of this custom designed program of personalized education are replicable.

"Educational Specifications: 1) Diagnosis of cognitive styles; 2) Achievement motivation program; 3) In-service training of faculty; 4) Research and development of new educational packages; 5) Carrel arcades; 6) Individualized programmed learning labs; 7) Learning resources center." (1976)
Cognitive style mapping is a great counseling idea that allows one's weirds. Building a school around the concept with adequate support is exciting. Problem in application has been lack of staff participation in in-service which blows total school concept. District is very helpful in offering materials and arranging demonstrations. The Institute for Educational Sciences at Oakland CC holds periodic conferences to explain PEP.

PLAN - James Dunn-Director, Developmental Systems, Am. Institutes for Research.

Guidance and instructional program developed by John Flanagan at AIR (1970).

"Students learn about reading, study, and listening skills in language arts; about individual differences, the processes of human learning and the theory of test construction in science; and about occupations, practical economics, job characteristics, and their requisite skills in social studies.

"Plan is an ungraded, individualized system of education which relies on individualized learning units or modules. Each module consists of a set of objectives, learning activities designed to help the student attain those objectives, and a test to ascertain progress toward the achievement of those objectives. The mastery of objectives is a highly individualized process in PLAN, varying in rate, sequence, and method. Student progress is monitored through extensive clerical services provided the teacher by a high-speed computer. The computer's function includes such tasks as test-scoring, record-keeping, matching the interests and abilities of students with the available materials, and assisting the student and his parents in their long-range goal formulation and planning. In addition, the computer is used to generate for each student a suggested program of studies which takes into consideration the student's long-range educational and vocational goals, his developed abilities and interests, local school system requirements, and so forth."

PLAN was to be used nationwide with evaluation comparing sampling of PROJECT TALENT in the 60's.

Project Innovation

EJ 074204-1973,
Russell Cassel - Editor/Developer, Project Innovation, Box 566, Chula Vista, Ca. 92010.

A series of CAI programs - computer, Voc/Ed Guidance, decision-making, humanistic psychology, systems analysis, counseling, peer counseling, etc. Video and audio tapes are also available in same areas. (1976)

RECAP - Anne Mare Yurof, RECAP, Office of the Santa Clara County Supt. of Schools, 100 Skyport Drive, San Jose, Ca. 95110 (408)299-4251.

A scheduling/testing/records system. (1976).

Rochester Career Guidance Project - A joint project supported by "the New York State Education Department, the Rochester City School District, the Eastman Kodak Company, and the New York State Employment Service. The project began as a joint effort to improve student exploration of career alternatives."

Computer applications were field-tested but discarded due to cost. Emphasis to microfilm file, slide-audio stories, with paraprofessional help. (1970).

SCHOLASTIC - Burroughs Education Management System Entry in Educational Housekeeping.

SIGI - System of Interactive Guidance and Information.

Arthur Kroll-Director, Career Dev. and Voc. Programs, ETS, Princeton, New Jersey 08540, (609)921-9000.

"SIGI...is an interactive computer-based aid to career decision-making; serves primarily students in, or about to enter, community colleges; complements the work of guidance counselors; uses a PDP-11 computer and cathode-ray tube terminals; operates under the RSTS/E time-sharing monitor and is programmed in P'SIC-PLUS' includes six interrelated subsystems (each subsystem raises a major question and helps the student answer it. These questions and answers form distinctive steps in decision-making.)

"Subsystems are: values, locate, compare, prediction, planning, strategy."

Costs (4 terminals) - $68,845+$7956 maintenance. SIGI lease and annual update service would be added. Paraprofessional us can cut staff costs.
For school of any size, four terminals may not meet demand as system may be reentered and is lengthy.

SRA - Science Research Associates.
Twenty job experience kits - 1976.

TGISS - Total Guidance Info. Support System
"The Total Guidance Information Support System is an integrated IBM computer support system designed to facilitate the function of the counselor in helping the student make decisions. The system provides pertinent information for this task through the application of high-speed information retrieval, gaming, diagnostic, and conversational dialogue techniques. The information retrieval system is specifically designed to meet the needs and requirements of the counselors in the Bartlesville, Oklahoma, Public School environment; and the TGISS is presently in operation at College High School in Bartlesville and Oklahoma State University in Stillwater.

"Access to information is accomplished through a remote video information display terminal."9 (1970)

VICS - Vocational Info. through Computer Systems.

"A computer-assisted guidance information system developed by the School District of Philadelphia. VICS offers local high school students the opportunity to access career and occupational information through the use of computer terminals located in their counselors' offices. The terminals connect into an HP 2000F located at the School District's Instructional Computer Center using BASIC.

"In a typical school year, twelve to fifteen thousand students access the system, making a total of some thirty to forty thousand occupation investigations.

"VICS and its companion programs have the general objective of offering current, accurant, and locally-tailored career and occupational information to all Philadelphia high school students. Special
emphasis is given to serving the needs of the disadvantaged student...

"Approximately 75% of the VICS occupational data base, because of its nation-wide orientation, would be directly usable by schools in other geographical locales. The remaining quarter of the data base is closely tied to the Philadelphia area and would have to be replaced with area-specific information by other would-be users. Since VICS has been designed for easy updating, once the revised data for a given geographical region were gathered, it would be a relatively routine matter to enter it into the data base."

Cost/port $10, minimum $275/month.

VVC - Verified Vocational Counseling

ED 087958-1973

"A computer assisted program used to assist students in planning their career. Using the 'Dictionary of Occupational Titles,' job descriptions and qualifications were compiled for all 120 families of occupations. This information is matched, by the computer, with information about the student that is derived from a special instrument assessing aptitudes, interests, temperament, reactions to physical demands, and reactions to working conditions. Recognizing that much of a student's vocational exploration is guided by that student's subjective vocational estimates, the VVC Model includes two sections designed to measure students' self-estimates. This information is compiled in a computer printout that provides a starting point for counselor-client interviews. This document contains the Student's Self-Estimate questionnaire."  

In use at Victor Valley CC, Victorville, Ca. Uses QUEST and GATB. Contact Earl Webb (714)245-4271.
RECOMMENDATION

ECC presently uses Taskmaster and Total Data Base on an IBM 360-40. This equipment can't handle CAI/Terminals due to core limitations.

The best counseling program, considering our size, would appear to be DISCOVERY when it is developed for California and CC's. Use would necessitate multi-terminal equipment and probably a mini-computer. Since data processing (and others) are considering additional hardware this might be coordinated.

In any case, we should be extremely wary of mandated equipment ala the state colleges. Results in poor use and instruction.

We might consider a joint powers career center which multi-terminal (2-400) facility could handle.
CAREER COUNSELING AND COMPUTER USE REFERENCES


5. Harris

6. Ibid


8. Ibid


CAREER ED COMPUTER SPINOFFS

Associated with a multi-terminal Career Ed Computer System could be many side benefits utilizing available technology. The following list is not intended to be all inclusive.

School Philosophy

Cognitive style-mapping - fit of school to student - Oakland CC, Michigan/WICHE.

Computer Assisted Instruction (CAI)

- Background PP Fastback ©, Alfred Bork - UCI, NWREL-REACT


Subject Areas

- Fine Arts - Wm. Arnold, Arizona St. Tempe and Robert Green, DeAnza CC, Ca.
- History - John Schutz, USC
- Interpersonal Communication - Pat Penland, U. of Pittsburgh.
- Music - Peter Hesbacher, Temple U.
- Reading - Linda Johnson, South Mountain High School, Phoenix, Arizona.
- Physics - Al Bork - UCI

Computer Language - CAI

PLANIT - NWREL (SDC) 1970, #CC - Total Data Base - Taskmaster.

Institutional Goals Inventory

Data Based Management - Glenn P. Smith, San Mateo CC
Test Development/Test File/Testing/Evaluation

Vern Guymon - Glendale CC, Scottsdale, Arizona and Orlando Furno, Caroll Co. (Md.) Public Schools.

Videotape/TV/Cable/Satellite/Telephone/Retail Purchasing Automation


Institutional Research - David Pagano, Denver Public Schools/Roger Yarkington, Am. Assoc. of C & J.C.'s/Cosumnes River CC, Ca./Arthur Cherdack, CCJ and CC/Elaine Tatham, Johnson Co. cc, Kansas.

High School Coordination - Terminal Use, Pre-enrollment, Record Transmittal, State Records Center Proposal.

Student Record - Access, confidentiality, terminals.


Staff Evaluation
ED 108097


Monitoring Federal Programs

Registration


Community Use - Contra Costa Co., ACCESS

Multi-Disciplinary Centers - Educational Cultural Center (ECC) - San Diego CC.

Medical Model - Computer 1/1975 Issue
SPIN-OFF REFERENCES

   


   
   Also see Hiltz, Stark, Roxanne, Computerized Conferencing, Communications Center, Research Report No. 2, New Jersey Institute of Technology, Newark.
VIII  COUNSELING MODEL

The state 1976-77 Catalog objective of ECC Counseling is:

"The Counseling Division offers guidance services to all students. These include assistance with academic planning, vocational exploration and personal guidance. Through use of counseling services, the student can help to maximize his or her college experience."

The 1976 Counseling Division Annual Report remarks:

"This past year has been one of increasingly broadened activity on the part of the counseling staff and continuing participation in many facets of the total college program. Our present and future objective will be to achieve greater involvement and influence within the total college community. The following outline is a chronicle of our activities in a variety of areas during the past year."

With a Fall 1975 FTE of 16.10 and an enrollment of 30,000, the enormity of our counseling load with added community outreach is scary.

What direction should counseling at ECC take?

Benjamin (1975) offers a good review of trends stressing the humanistic movement, attention to the unique total person, and with a futures orientation, counseling becoming part of a Human Development Center Team. Continual In-service for entire staff (certificated and non-certificated) with appropriate evaluation and feedback.

Broad models are presented by WICHE (1973) The Eco/System Model: Designing Campus Environments, Stewart and Winborn, and Riessman (1976). These involve regenerative systems planning with goals, time line, evaluation and feedback.

ACT has probably the best research back up to CC counseling. Their instruments are validated at our level and even developed for CC use. Hollands career model plus cognitive style makes their career program counseling oriented.

Present financial and political pressures require attention in model development.

The ECC Counseling Center report of 1/20/76 lists numerous staff concerns that require attention. In
addition, the APGA and ASCA function statements are noted. The following were read:

- CPGA Monograph 4 (1972) lists master plan general requirements and specific community college (Norris and Walker) suggestions.

- CC Chancellors 6/8/76 report on counseling is noted with State of California Department of Finance 2/25/76 Summary Report.

- Postsecondary alternatives (9/75)

- PPS in California Public Schools (1975)

- WICHE-Preparing Tomorrow's Campus Mental Health Professionals (9/73).

- WICHE-Counseling Outreach (7/73).

- CCPA 11/13/75 - ECC Counseling Conference Notes on Bolles Method used at CSU, Sacramento. Five hundred individual "skills" suggested.

- Ramey "Intimate Networks" (1975).


Specific programs at the following colleges:

OAKLAND CC, MICHIGAN
Individual differences/Cognitive Style Determination/Multiple Abilities/Staff Inservice/Fit of School to Student.

EVERGREEN ST. C. -
"Being accountable to students by contributing to institutional effectiveness is fundamental to student development programs. This means remaining sensitive to how our environment affects the campus community members and feeding this information into the organizational structure. This requires playing a part in insisting on our being consistent with fundamental purposes of the college in decisionmaking and taking action. More specifically it means building mechanisms by which the college can seek and rapidly respond to expressed student concerns so that any gap between the institution and its largest internal constituency can be dealt with openly and kept minimal.

"Numerous students have found our career-planning resources useful in identifying their initial vocation-
al goals. With through counseling, students can apply vocational objectives to planning programs of work and study. We attempt to create in students not just the idea that they must choose an occupation but that they face a series of developmental tasks extending indefinitely into the future, all demanding continual decisions and growth and the development of new skills and abilities. Counseling Services works with the offices of Financial Aid and Placement and Cooperative Education and the Library to collect a wide variety of resources ranging from general occupational information to data on specific professional fields."

GLENDALE CC, ARIZONA
Openness of staff and curriculum.

GROSSMONT CC, CALIFORNIA
Community outreach

JOHNSON CO. CC, KANSAS
Research and applications

MOORPARK CC, CALIFORNIA
Career Center/Counseling Philosophy

MOUNT ROYAL C, CALGARY CANADA
Integrated architectural design

ORANGE COAST CC, CALIFORNIA
Technology use

UC SANTA CRUZ
Setting

SIERRA CC, CALIFORNIA
CAI

SIMON FRASER - VANCOUVER
Setting, Philosophy

All the above suggests a future's fantasy ECC Counseling Center of the following nature:

- Counseling is the center of campus/community activity supported by a mini-computer with multi-terminals throughout the campus, community, and our feeder high schools.

- Campus philosophy/goal is oriented to experiential growth and counseling network.
- Ecosystem organization - cognitive style, ACT IV for placement and course selection. Emphasis is school fit to person, growth and prevention.

- Analog abilities (RT brain) are emphasized equally with digital (Lt brain).

- Counseling goals are reevaluated on a regular basis with adequate time available for development.

- Counseling emphasis is not on counseling in offices.

- Physical setting is open (no counters)

- Group work emphasized

- Support curriculum is open and available for community use - day/night/weekends.

- Campus helping services (Career Center / Community Services/coop ed/ Counseling/Disabled Center/Division Counselors/Financial Aids/Library/Peers Counseling/Placement/POD/Student Activities/VEA/VOICE/Womens Center,etc.) form a network with regular communication and feedback.

- Mental Health Advisory Committee (one-half staff - one-half community) meets regularly for community needs.

- Counseling appointments and support is open year round with adequate staff.

- Counselors in active co-facilitative process with staff.9

- Total ECC staff expertise on file and used for referral.

- Research, evaluation and feedback to short/long term goals with anticipation of societal problems. Use of area/state/national data files. Longitudinal follow-up.

- Career Ed is part of total model, not tack on.

- Peer counseling use expanded to community.

- Student data base defined with relation to goal(s). Feeder high schools send data on tape. Student data base is secure. Authorized access according to the Privacy Act of 1974. See FIBS Pub. 41 and NB SIR 75-909.
- Computer emphasis is student support with appropriate budget.

- Computer processes student course requests/schedule/all listings/attendance/state-federal reports/student record/counseling housekeeping/etc.

- Cable TV/Computer conferencing/telephone access allows home view with computer/ADA contact.

- Computer open for gaming/decision making, etc.

- Pre-enrollment handled by telephone/CRT/computer (detective emphasis eliminated).

- Test score/student progress input to computer providing continual feedback to campus helpers plus staff/curriculum evaluation.
COUNSELING MODEL REFERENCES


IX  CONCLUSION

Six months change of time frame produces great pressure. It might be worthwhile for ECC to consider developing a CAI unit on how to handle the changes a sabbatical brings (particularly for those who are married and/or friends.

Thanks for the opportunity to visit (17,000 miles) some wonderful schools, cities, and friends (new and old).

taking a new step, uttering a new word, is what people fear most

Dostoevsky

facts are the enemy of truth

Cervantes