

Using Computer Technology to Aid Faculty Advising

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The faculty of a college or university are an integral part of the advising process. They are either the only source for assisting students with their academic advising needs, or they function as part of a larger advising system administered by centralized or decentralized advising professionals. In recent years, with the advent of computerized advising reports, peer advisors, and professional full-time advisors, it appears that student-faculty contact has diminished. In many institutions faculty are unsure about their advising role, and students report lack of contact with faculty advisors.^{1,2,3,4}

It is critical that faculty be involved in advising students: the Literature amply supports both the need and the value of faculty advising.^{5,6,7}

This article focuses on the use of in-place technology to assign preselected faculty advisors to students, enhancing faculty-student contact with incoming students. Specifically, the article describes a computer program that has created an *advisor file* and links advisor information with student records. The program provides for computer generated advisor-advisee

¹ R.W. Spencer, E.D. Peterson and G.L. Kramer, "Utilizing College Advising Centers to Facilitate and Revitalize Academic Advising," NACADA JOURNAL, 2, (1982), pp. 13-23.

G. Carney and A. Barak, "A Survey of Student Needs and Student Personnel Seminars," JOURNAL OF COLLEGE STUDENT PERSONNEL, 17, (1976), pp. 200-204.

³ L.R. Meeth, "Evaluation of Traditional Faculty Academic Advising Program." (unpublished paper, 1971).

⁴ C.J. Polson and A.P. Jurich, "The Departmental Academic Advising Center: An Alternative to Faculty Advising," JOURNAL OF COLLEGE STUDENT PERSONNEL, 20, (1979), pp. 249-252.

A.W. Astin, FOUR CRITICAL YEARS, (San Francisco: Jossey-Bass, 1977).

⁶ E.T. Pascarella and P.T. Terrenzini, "Patterns of Student-Faculty Informal Interaction Beyond the Classroom and Volunteering Alteration," JOURNAL OF HIGHER EDUCATION, 48, (1977), pp. 540-552.

⁷ J.R. Wilder, "A Successful Academic Advising Program: Essential Ingredients," JOURNAL OF COLLEGE STUDENT PERSONNEL, 22, (1981), pp. 488-492.

reports, letters of invitation to students to receive advising from faculty, and faculty advisor information on advising reports that are distributed to students each semester.

Background

Since 1976, **Brigham** Young University has provided students at the beginning of each semester a computerized academic advising progress report entitled **Advking by Computer** (ABC). This evaluation report links graduation requirements and shows student progress in completing those requirements. The **ABC** report specifies

- university and major requirements;
- university credits completed and applied to requirements;
- transfer credits accepted;
- a summary of all college credits; and,
- current enrollment.

Identical information is available on-line on computers in the advising centers. An advising center, established in each academic college since 1972 and staffed with full-time professional advisors, provides academic advising from 8:00 to 5:00 daily. At the center, each student can obtain up-to-date information from someone trained in the use of advising data. The student is not restricted to a single advisor, but may be referred to a faculty member according to student need. Advising centers complement the work of faculty advisors, who consult on such in-depth matters as major requirements and career planning.

Problem

Generally, faculty are willing to interact with students beyond the classroom, and the Literature, as previously stated, underscores the importance of such faculty-student contact, especially for academic advising. The institution also values the role of faculty advising, because of its influence on student retention and student satisfaction with education. But the academic advising center and the computer report have decreased student contact with faculty advisors at B W . Although the informational needs of students were better met by advising center contacts, the faculty still were crucial and necessary for student advising contacts. To insure continued faculty involvement, the computer-aided faculty advising program was developed.

Developing Computer-Aided Faculty Advking

Through in-place technology, the ABC Progress Report and its integrated files, computer-aided faculty advising can do the following:

1. **Consistently** inform students who their assigned faculty advisor is and thereby bring faculty and students closer together so that students a) might receive advising in their major and professional direction in their career choices, and b) become acquainted with faculty in their field.
2. Facilitate letting students know who their faculty advisor is before they enter the university.

3. Insert the faculty advisor's name, address, and phone number on student ABC Progress Report.
4. Keep the faculty advisor up-to-date on number of advisees.

A faculty advisor **file** has been designed to build individual information on each faculty advisor selected by the department and assigned to advise students (see Illustration 1). The new file, created from information submitted by each academic department and based on an assigned advisor code, lists specific demographic data about the faculty advisor and notes the advisor's area of expertise within the academic discipline — information important in making a wise accurate faculty-student assignment (see Illustration 2). This file generates a list of all assigned faculty advisors by department and expertise (see Illustration 3).

From the admission form, students select their major. The alpha listing of majors on the student admissions form is later converted **internally** by the university to a numeric six-digit code that represents the name of the college, department, and major or specialization within a major (see Illustration 4). Each semester a list of new incoming students by major or specialty is available. From this list and the faculty advisor list mentioned above, advisor-advisee assignments are made.

The assigned advisor code is inserted on the computer screen that list major classes (see Illustration 5). This record was chosen because in addition to the major, it lists the student's date of entry, related **major/degree information**, and was central to project needs. Programming made it possible to link the student major record, which includes an assigned advisor code, with individual student ABC Progress Reports (see Illustrations 5 and 6). This was the main focus of the project — to provide regularly and accurately to students, via the ABC Progress Report, the name and address of their faculty advisor. But to stretch the project's intent and to give it a more personal touch, each department chair was asked to write a letter of welcome to new incoming students that introduced the student's faculty advisor (see Illustration 7). A computer program was written to match student advisee with faculty advisor, to insert in the letter the name of the specific advisor and to generate automatically a letter for each new incoming student. In addition, because of these programming efforts, an advisor-advisee list and other relevant information are generated each term and sent to the appropriate faculty advisor (see Illustration 8).

Summary

Computer-aided faculty advising communicates to students, on a regular basis, who their faculty advisor is, and where the advisor is located. Similarly, faculty advisors, thanks to the advisor-advisee computer generated report, are aware of assigned advisees. Also, the computer-aided advisor system allows academic departments or advising centers to maintain, update, and monitor advisor-advisee fdes.

The advisor fde system's most attractive feature is its flexibility in making advisor-advisee assignments. **As** pointed out, the department administrator can preselect faculty for advising not only on the basis of academic expertise, but also other advisee characteristics or needs that can be matched to the background and interest of the advisor. For example, advisor-advisee assignments could be based on student academic standing (from probation to honors); academic class (from freshmen to **Ph.D.** candidate); teacher certification interest;

new transfer status; **older/re-entry** students; students uncertain about their major selection; handicapped students; foreign or minority students.

Computer-aided faculty advising is a good compromise between mandatory advising and no requirement of a faculty-student relationship at all. Computer-aided faculty advising can influence the frequency of contact between advisor and **advisees**, provide precise information on who is advising whom, and efficiently assigns faculty advisors to students.

ILLUSTRATION 1

FACULTY ADVISOR INPUT SCREEN

646	9/27/84	ADVISORS
ADVISOR CODE	005	
NAME	FACULTY ADVISOR	
AREA OF EXPERTISE	AG ECON ANALYSIS (26)	
DEPT CODE	2824	
DEPARTMENT	AGRIC. ECONOMICS	
COLLEGE	BIOL & AGRIC	
CAMPUS ADDRESS	473 WIDB	
TELEPHONE	378-6036	

ILLUSTRATION2

BIOLOGY DEPARTMENT FACULTY ADVISORS

INTEREST AREA	Advisors	
Ecology Related Subjects	Dr. Barnes Dr. Pritchett Dr. Smith Dr. White	177 WIDB; 2434 173 WIDB; 2419 501 WIDB; 2492 161 WIDB; 4860
Physiology Related Subjects	Dr. Heninger Dr. Jaussi Dr. Rhees Dr. Winder	574 WIDB; 2006 585 WIDB; 2353 587 WIDB; 2158 549A WIDB;
Pre-medical and Pre-Dental	Any faculty in Department	
Freshwater and Marine Biology	Dr. Braithwaite Dr. Barnes Dr. Shiozawa	189 WIDB; 2462 177 WIDB; 2434 179 WIDB; 4972
Wildlife and Range	Dr. Smith	501 WIDB; 2492
Undecided and/or confused	Dr. Heninger OR ANY FACULTY MEMBER IN THE DEPARTMENT	574 WIDB; 2006

ILLUSTRATION 3

COLLEGE ADVISORS BY ADVISOR CODE

BIOLOGY DEPARTMENT

AOVCOOE	NAME	ADDRESS	PHONE	COC	DEPT	EXPERTISE
0062	DORALD W. ALLRED	290 MLBM	378-5052	28	54	ENTOMOLOGY(23)
0063	GARY M. BOOTH	699 WIOB	378-3458	28	54	ENTOMOLOGY/TOXICOLOGY(23)
0064	CLIVE D. JORGENSEN	537 WIOB	378-3815	28	54	ENTOMOLOGY/PEST MGT(23)
0065	ARMAND WHITEHEAD	421 WIOB	378-4459	20	54	ENTOMOLOGY(23)
0066	CLYDE L. PRITCHETT	173 WIOB	378-2419	28	54	VER ZOO/WLD MGT(26)
0067	H. DUANE SMITH	501 WIOB	378-2492	28	54	WLDLF MGT, MAMMALOLOGY(26)
0068	A. LESTER ALLEN	597 WIOB	378-7659	28	54	OEVEL. BIO. PRE-MGT(30)
0069	FERRON L. ANDERSEN	123 WIOB	378-4145	28	54	PARASITOLOGY-PUB HEALTH(31)
0070	JAMES R. BARNES	177 WIOB	378-2434	28	54	FRESHWATER BIOLOGY-ECOLOGY(31)
0071	RICHARD W. BAUMANN	163 WIOB/338 MLBM	378-2175	28	54	AQUATIC ENTOM-ENTOM GEN(31)
0072	WILLIAM S. BRUSHAW	595 WIOB	378-3677	28	54	DEVELOPMENTAL BIOLOGY(31)
0073	LEE F. BRAITHWAITE	189 WIOB	378-2462	28	54	MARINE BIOLOGY(31)
0074	JAMES L. FARMER	591 WIOB	378-2153	28	54	MOLECULAR GENETICS(31)
0075	RICHARD HECKMANN	153 WIOB	378-2495	28	54	HISTOLOGY/FISH DIS/AGAUOL(31)
0076	DUANE JEFFERY	589 WIOB	378-2155	28	54	GENETICS. EVOL BIOLOGY(31)
0077	JOSEPH R. MURPHY	167 WIOB	378-4075	28	54	ORNITHOLOGY. RAPTOR BIO(31)
0078	R. WARD RHEES	587 WIOB	378-2158	28	54	PHYSIOLOGY. PHARMACOLOGY(31)
0079	ROBERT E. SEEHILLER	593 WIOB	378-2303	28	54	TERATOLOGY. DEV BIOLOGY(31)
0080	DENNIS SHIOZAWA	147A WIOB	378-4972	28	54	FRESHWATER BIOLOGY(31)
0081	JACK W. SITES, JR.	151 WIOB	378-2279	28	54	EVOL BIOLOGY/VERT ZOO/SYSTEMA(31)
0082	KENT M. VAN DE GRAAFF	337 WIOB	378-2150	28	54	HUMAN AND COMP ANATOMY(31)
0083	CLAYTON WHITE	161 WIOB	378-4860	28	54	VERTEBRATE BIOLOGY(31)
0084	WILLIAM Y. WINDER	549-A WIOB	378-3093	78	54	EXERCISE PHYSIOLOGY/ENDOCRINOLOGY(31)
0085	DUANE E. JEFFERY	589 WIOB	378-2155	28	30	CROP SCIENCE (31)

00604

ILLUSTRATION 4

ADMISSIONS FORM

ALPHA LIST OF MAJORS

College of Biology & Agriculture

Agribusiness (Range Science)
 Agribusiness Management
 (Agricultural Economics)
Agricultural Economics Analysis
Animal Health Technology
 Botany
 Business-Production
 (Animal Science)
 Crop Science
Entomology
 Farm & Ranch Management
 Food Industry Management
 Food Science
Food Systems Administration
Fruit-Vegetable Science
Medical Dietetics
 Medical Technology Integrated
Microbiology
Ornamental (Horticulture)
Premed-Dent (Botany)
Premed-Dent (Microbiology)

Premed-Dent (Zoology)
 Preprofessional Nutrition
Production-Agribusiness
(Agronomy)
 Range Resources
 Science-Prevet
 (Animal Science)
 Secondary Teaching
 Composite (**Botany**)
 Secondary Teaching
Composite (Microbiology)
 Secondary Teaching
Composite (Zoology)
 Soil Science
 Wildlife & Range
 Resources (Range Science)
 Wildlife & Range
 Resources (Zoology)
Zoology

 UNIVERSITY NUMERIC EQUIVALENT
 TO ALPHA LIST OF MAJORS

COLLEGE OF BIOLOGY AND AGRICULTURE

282420 AGRICULTURAL ECONOMICS
 282420 REAL ESTATE
 282422 AGRIBUSINESS MGT
 282423 FARM & RANCH MGT
 282424 FOOD INDUSTRY MGT
 282426 AGRIC ECON ANALYSIS
 283000 AGRONOMY
 283029 SOIL SCIENCE
 283030 PROD-AGRIBUSINESS
 283031 CROP SCIENCE
 283100 HORTICULTURE
 283124 FRUIT-VEGE SCIENCE
 283125 ORNAMENTAL
 283300 ANIMAL SCIENCE
 283327 ANIMAL HEALTH
 283330 SCIENCE-PREVET
 283331 BUSINESS-PRODUCTION
 283900 BOTANY
 283921 BOTANY
 283931 PREMED-DENT BOTANY
 284000 RANGE SCIENCE
 284021 AGRIBUSINESS
 284022 RANGE RESOURCES
 284024 WILDLIFE & RANGE RESOURCES

284300 FOOD SCIENCE & NUTRITION
 284320 FOOD SCIENCE
 284322 MEDICAL DIETETICS
 284324 FOOD SYSTEMS ADMIN
 284325 PREPROFESSIONAL NUTRITION
 285100 MICROBIOLOGY
 285120 MICROBIOLOGY
 285124 PREMED-DENT MICROBIOLOGY
 285200 MEDICAL TECHNOLOGY
 285220 MEDICAL TECHNOLOGY
 285400 ZOOLOGY
 285423 ENTOMOLOGY
 285426 WILDLIFE & RANGE RESOURCES
 285430 PREMED-DENT ZOOLOGY
 285431 ZOOLOGY
 289900 BIOLOGY
 289920 COMP TEACHING-BOTANY
 289921 COMP TEACHING-MICROBIOLOGY
 289922 COMP TEACHING-ZOOLOGY

ILLUSTRATION 5

MAJOR SCREEN WHERE
ADVISOR CODE IS INSERTED

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R15          09/14/84          EDIT=YES          ** UPDATE **
5555555555 STUDENT JOE BROWN 555555          YR TERM  CAMPUS DAY
          HONORS PCN SEX CITIZN BIRTHDAY REC STATUS CUR 84 FALL  EVENING
          0 NO H 0 UNK 12/28/34 COMPLET LAST 84 WNIR
          STREET ADDRESS CITY STATE ZIP/CNTRY WHOSE TELEPHONE
HONE 859 S 1000 E #6 EUGENE OR 58493 1 FATHER
LOCAL 41202 HELAHAN HILLS PROVO UT 84604 6 CURRNT 377-6078
          REG STATUS JR ENG EXAM LAST CHNC EARNED GRADED POINTS CPA
CURR 9 REPEAT CILC 212 07/30/84 172.5 152.0 563.40 3.71 TOTAL
NEXT 9 REPEAT 167.5 147.0 551.90 3.75 BYU
          GRAD FINCL ACADN UNIVS CU ST ST LN 0.0 RESIDENT
HOLDS 0 0 0 0 0 0
1 HAJOR NUMBER (1) (2) (3) (4) (5) (6)
1 CURRENT MAJOR STATUS FLAG 1
4 SR 84 5 FAL CLASS-YR TERM ENTERED 4 845
28 54 30 MAJOR 285430
00 00 00 MINOR 000000
0 1 HI EVL OPT-TEACH CERT 0 1
ADVISOR CODE-----00-0081 DEGREE INFORMATION 00 081
00/00 14M YY DATE APPLIED/RECEIVED 0000
0 NO 0 NO CLEARANCE COL-CRD OFF 0 0
00 0 YR TERM EXPTD/RECEIVD 00 0
000 DECREE 000
0 NO 0 NO 0 NO HONOR-CUM LAUDE-SCHLR 0 0 0
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ADVISING BY COMPUTER (ABC) REPORT

October 1985

ILLUSTRATION7

COMPUTER GENERATED FACULTY ADVISOR LETTER



Brigham Young University

Department of Zoology

September 30, 1984

Joe Student
11202 Helaman Hall
Provo, UT 84604

Dear Joe:

We were very pleased to learn that you have chosen a major in zoology, and want to take this time to extend a welcome to you from our department. Our excellent faculty and facilities, plus the breadth of courses offered should provide you with a stimulating and rewarding university experience.

We have asked Dr. Sites to serve as your faculty advisor: he can be reached at the address below. His role is to advise you on all matters related to your major, including classes and specific occupations. If there is another faculty member you desire as your advisor, you are free to make a change when you get on campus.

Dynamic research is going on throughout the department and some undergraduate students have become so involved in these programs that they have been able to publish formal research papers. If your interests and abilities lie in this area, we urge you to keep this challenging and rewarding activity in mind.

We anticipate meeting you during the orientation of new students where we will give you a more detailed introduction to our department and its facilities. Meanwhile, if we can be of assistance in any way, please contact us here in the department, either by letter or phone. We are in the office Monday through Friday, 8 to 5.

With all best wishes,

Richard W. Heninger, Chairman
Department of Zoology

SENT TO STUDENTS BEFORE ON-CAMPUS ORIENTATION

574 WIDB Brigham Young University Provo, Utah 84602 USA (801) 378-3000

October 1985

ILLUSTRATION 8

ADVISOR · ADVISEE LIST

BIOL & AGRIC

JACK W. SITES, JR.
DEPARTMENT: ZOOLOGY

ADVISOR CODE: 081

CAMPUS ADDRESS: 151 W108 CAMPUS PHONE: 378-2279
AREA OF EXPERTISE: EVOL BIOL/VEET ZOO/SYSTEMA(31)

ASSIGNED STUOENTS:

NAME	SSN	MAJOR	MAJOR	CLASS	MAILING ADDRESS		
BLACKHURST ALAN R	528-35-7458	285431	ZOOLOGY	FR	2615 NANTUCKET DR.	SALT LAKE CITY	UT 84121
FENTON WILLIAM CHARLE	533-68-4386	285430	PREMED-DENT ZOO	FR	1614 22ND NE	AUBURN	MA 98002
HAARMANN TIMOTHY KARL	585-02-6088	285431	ZOOLOGY	FR	358 KIMBERLY	LOS ALAMOS	NM 87514
HATHAWAY EVAN WAYNE	518-84-3517	285431	ZOOLOGY	JR	152 SOUTH 100 WEST	HEBER	ID 83440
HOLMES JASON EDWARD	572-25-9233	285430	PREMED-DENT ZOO	JR	988 NORTH 560 EAST	OREM	UT 84057
WNT OONALO EDWARD	114-64-6821	285430	PREMED-DENT ZOO	FR	2143 N 250 E	PROVO	UT 84601
MERRILL JUDY RENAE	518-76-2622	285431	ZOOLOGY	FR	3851 WANDIA	IDAHO FALLS	ID 83401
MURDOCK CAROLYN KATE	529-27-1161	285430	PREMED-DENT ZOO	FR	457 E 600 S	HEBER CITY	UT 84032
PILLING MICHAEL J	078-68-8296	285430	PREMED-DENT ZOO	FR	BOX 182	MAGRATH	AB CAN
THORPE GARY WAYNE	520-86-9443	285431	ZOOLOGY	FR	848 CUSTER STREET	CHEYENNE	WY 82009
WILSON EDWARD ALAN	550-37-1516	285431	ZOOLOGY	JR	3239 NOCOLET COURT	REDDING	CA 96001