

When the project began, it had the following objectives:

1. Communication to student at point of registration about transferability
2. Accommodation of change of transfer institution
3. Facilitate comparison of community college suggested transfer credits with senior institution evaluation
4. Easier process for senior institution to communicate equivalencies to community college
5. Put resolution of conflict at institution/institution level rather than student/institution level

These objectives have been met with some added unanticipated benefit.

The ease with which a project like this can be started and implemented depends in large part on the status of statewide articulation programs. Where a common core of general education requirements has been established and agreed to, i.e., six credit hours of English composition, eight credit hours of science to include at least one laboratory science, etc. development is relatively mechanical. More specialized courses, however, need to be negotiated by individual institutions.

This is the case in the State of Michigan where the Michigan Association of College Registrars and Admissions Officers (MACRAO) have spearheaded the successful effort to establish a common core curriculum. Program design and implementation was primarily internal focusing on the efforts of the Data Processing staff and user input.

Where no such state organization exists, this kind of thrust may be the catalyst that could begin movement in a core curriculum direction. Given the very positive reactions from both two-year and four-year institutions, there seem to be an eagerness to work toward strong cooperation in the articulation process.

The equipment used to run the program is currently an IBM System 34 with 128K memory and 128K megabyte hard disk storage. Memory use at the present time is 10K. The software easily convertible to run on an IBM System 36, which is advantageous as the migration from a System 34 to the 36 is becoming a common migration.

A future enhancement in the planning stage is to develop curriculum data banks in the vocational/occupational program areas. The fee receipt would indicate whether or not a course was a part of that particular curriculum. For example, if a student with a declared major of Data Processing enrolled in a management course, that course would be flagged as "not normally a part of the Data Processing program," because most of the vocational programs are highly prescriptive.

This approach to articulation certainly will not solve all the problems associated with the transfer process, but it is better than the disappointment awaiting many students who learn that some of their coursework was interesting but not transferable.

Book Reviews and Notes

Stanley M. Grabowski, *Marketing in Higher Education*, AAHE-ERIC/Higher Education Research Report No. 5, Washington D.C.: American Association for Higher Education, 1981, pp. 41, \$6.33

With the proliferation of marketing publications in the past two years, it is refreshing to find a report that clearly defines the need for a holistic marketing strategy, written before large enrollment declines actually began.

Grabowski summarizes the need for new marketing perspectives in the 1980's and the need to overcome the inertia institutions of higher education have previously exhibited in the face of change. Important ethical standards are also considered, and how they should be employed in a period of intense marketing activity, though questionable examples of marketing "excesses" are used.

The report emphasizes attracting and retaining students through use of a comprehensive, student oriented marketing plan involving analysis of the entire institution, student needs assessment, internal involvement and cooperation, and a community profile database.

An excellent pre-1980 marketing bibliography is included and appropriate quotes from the best sources contribute to the report. Though Grabowski emphasizes that small colleges, especially private ones, are best suited for intensive, integrated and coordinated marketing efforts, there are also many ideas adaptable for moderate and large size institutions.

In Grabowski's comprehensive strategy, advising and counseling are significant elements in marketing. The importance of retention is stressed as critical not only to institutional stability but also to recruitment.

The importance of a commitment to the institutional marketing effort by the chief executive officer and the appointment of a single director in charge, acting as coordinator, are critical first stages of the process. Next, institutions must define missions, identify strengths, thoroughly research, and carefully plan the ongoing effort. Finally, the focus of marketing must be primarily on the goals of students the institution serves and not simply on institutional self-interest.

The problem with the report is the emphasis on the need to attract non-traditional students in future marketing plans, supported by a recitation of the phases of the traditional student selection process. By their status, non-traditional students do not follow the same selection sequence as traditional students, and, each group should be analyzed separately.

Although the report emphasizes only College Board service and information, it is still a concise summary of the need for a comprehensive marketing strategy and an elementary review of essential higher education marketing techniques.

Larry C. Melton
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Gerard G. Gold, *Business and Higher Education: Toward New Alliances*, San Francisco: Jossey-Bass, 1981, pp. 120, \$6.95

The editor is justified in his claim that for the first time a reader can find in one volume a framework for understanding programs and issues in the collaboration of higher education and the corporate sector. The study contains:

- a history of the developing alliance between the two for the past one hundred years;
- a description of existing alliances;
- the results of the federal government's efforts to stimulate new kinds of interactions between business and post-secondary institutions; and,
- a model for economic development partnerships at the local level.

Those university and college personnel, including advisors, involved with lifelong and continuing education and with extension services, will find this slim volume to be an abundance of insights and challenging ideas.

This study is an excellent resource for those in academia investigating ways to capitalize on the vast financial investment in employee training programs made not only by corporations and businesses but by unions and government at all levels. While the financial stakes, the number of people involved, and the array of non-collegiate institutions providing training programs are staggering, only a small segment of the higher education community is aware of the immensity of the "shadow education system" for both private and public employees. In 1980, for example, the total expenditure of higher education institutions was sixty-five billion dollars, but for the "shadow" system, it was thirty billion. Another example is the federal government's funding in 1979 of three hundred and thirty-three million training hours for two million civilian employees.

It is important to understand the context of these figures. Employee training has become an industry in itself: companies are making and selling their own training films; firms are producing audio cassettes, videotapes, projectors, slides, computerized learning systems, and videodiscs; companies are publishing technical and business books and packaged learning systems; and, companies are offering consulting services in virtually all specialty areas of employee education. The data suggest that the higher education share of this expanding market is small. Some observers contend that higher education has lost its leadership in the continuing education of professionals. For example, three thousand organizations offer business and management courses, only seven hundred of which are provided by colleges and universities. Forty thousand business seminars, excluding college and university programs, are offered to the public annually. The American Management Association's three thousand two-hundred programs enroll 100,000 annually.

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The immense and ever-growing corporate and public funding of employee training is without question a rich and seemingly inexhaustible vein to be mined by higher education. To extract valuable minerals from that vein, colleges and universities will have to review and improve upon what they have traditionally done in this area and to examine their role in the local community and region, using, if necessary, their resources in new ways. They will have to study the implications of the prediction that the average worker will hold up to eight different jobs in a lifetime and consequently, because these jobs may be quite different from each other, will need long range and periodic retraining. The best sources of information upon which an institution can base its outreach plans are close to home. "Contacting the campuses, corporations, unions, educational brokers and related groups in one's own community is the quickest way to learn about the starting points for developing real relationships among real institutions." This is a challenging book, one having a great deal of potential relevance for expanded and modified advising systems.

Thomas C. Kishler
Michigan State University

Frank R. DiSilvestro, Editor, *New Directions for Continuing Education: Advising and Counseling Adult Learners*, San Francisco: Jossey-Bass, Inc., 1981, pp. 113, \$8.95

New articles on educational enrollment in *The Chronicle*, *Newsweek* magazine and local newspapers emphasize the growing non-traditional college population. Many articles claim that enrollment increases for colleges and universities are due largely to the influx of students who fall into the over 25 year old category.

For this reason, *New Directions for Continuing Education: Advising and Counseling Adult Learners* is probably one of the seminal volumes of the mid-eighties. The text is a sourcebook of 14 articles on various aspects of advising adults. These articles or chapters are organized into five basic divisions 1) overview of the literature; 2) community-based and workplace settings for counseling adults; 3) returning or re-entry adult students; 4) descriptions of actual programs in non-traditional settings; and 5) the future: new approaches and emerging issues. The sourcebook also contains an index: an invaluable aid to a counselor seeking information.

For any counselor or faculty who expects to work with non-traditional students, this sourcebook should be mandatory reading. It provides information for inexperienced personnel, and insights for those who have worked extensively with adult students. The three most helpful articles are DiSilvestro's "Perspectives on Counseling Adult Learners," Levine and Piggins' "Workplace Counseling: The Missing Link," and Mangano and Corrado's "Easy Academic Reentry."

DiSilvestro quickly reviews major available studies and groups them according to theme. One qualification must be added, the sourcebook was copyrighted in 1981. Since the topic of adult learners is such a fertile field of study, recent studies are missing from the bibliographies.

The needs and problems of adult students are the focus of the next two articles. Levine and Piggins outline the advantages of the workplace as the location of the initial contact

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between educational institutions and potential adult students. In spite of tight budgets and insufficient staffs, universities and colleges can utilize the benefits of the workplace locations to break down the barriers that hold potential adult students back from enrolling in classes. An under-utilized population is the adult worker who has successfully completed an educational program. As peer counselors, they can convey their own enthusiasm to their colleagues, encouraging them with information on opportunities, assessment of proficiencies and assistance in establishing contact with educational institutions and agencies.

Although researched at the community college-level, the taxonomy of needs prepared by Mangano and Corrado can become a basis for recognizing and understanding the needs of any adult student population regardless of educational institutions. These students, often commuters, have a high-level need to succeed in courses directly related to their career choices. Counselors and advisors must work with that need in order to help all students succeed.

By providing extensive and intelligent bibliographies as well as cogent articles, the sourcebook becomes a really effective starting point for anyone concerned about quality advising and counseling for adult students.

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William W. Lau, Editor, *American University Programs in Computer Science — Their Facilities, Resources and Course Offerings*, Fullerton: GGL Educational Press, 1984, pp. vi-210, \$20.00

American University Programs in Computer Science was compiled to provide a comprehensive guide for:

1. college-bound and graduate students considering a university education in computer science or in a specialized area within computer science
2. employers of computer science graduates who wish to know more about the various program offerings to help formulate their recruitment plans
3. public and private organizations interested in contracting universities for research, special training, or other consulting assignments, and
4. computer scientists who seek a teaching or research career with a university.

The contents of the book include an introduction, examples of computer systems, a glossary of terms, listing of programs by institution, and an appendix. The institutions are restricted to universities and are listed alphabetically within each state. The format for each of the 160 computer science programs listed includes:

Institution name
Location (city, state, mailing address)
Telephone number
Description of institutional characteristics
Description of departmental characteristics
Degree programs

Computer hardware and operating system software
Faculty
Course offerings

Since the criteria for selecting the institutions was not specified by Lau, I compared his selection of institutions with the Gourman Report, which ranks the top quality academic programs in the United States. Of Gourman's top thirty-one undergraduate computer science programs, Lau included twenty-five. Of the additional twenty-three computer science programs recognized but not ranked by Gourman, Lau included thirteen.

The information on computer science programs is comprehensive, well organized and interesting. It is a useful sourcebook for counselors, academic advisors, librarians, educators and students. It replaces the need for an extensive collection of college catalogs. In fact, Lau's book includes more information than most catalogs. Students, parents, and counselors are, however, cautioned to contact a prospective university or its catalog for specific institutional information such as admissions requirements to the university and computer science department, tuition and other costs, and degree requirements.

The main disadvantage with this type of reference book is that much of the data is out of date by the time it is published, especially in a field as dynamic as computer science. Changes are continuous in curriculum, computer hardware and software, and department characteristics.

I found *American University Programs in Computer Science — Their Facilities, Resources and Course Offerings* a helpful resource for obtaining an overview and comparison of university computer science programs.

Erlend D. Peterson
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Martha Maxwell, *Improving Student Learning Skills*, Washington, D.C.: Jossey-Bass Publishers, 1979, pp. 518, \$29.95.

Although this book was first published in 1979, it continues to be a useful and timely text, because it is about the problems students have adapting to the academic demands of college courses and about the learning-support services colleges provide to help those students. The book is based on Maxwell's more than thirty years of experience working with college students in her career roles of counselor, teacher, academic advisor, reading/learning disabilities specialist, researcher, administrator, and perennial student. The book is also based on the author's thorough review of the programs and research that emerged in higher educational institutions during the radical changes of the 1960s and 1970s. Maxwell utilized the ideas, failures, frustrations, and successes of over a thousand college reading-skills and learning-skills specialists as a part of her body of knowledge for the text.

The author organized *Improving Student Learning Skills* into four distinctive parts. Part One, entitled "Recognizing the Extent of the Remediation Problem," is composed of two chapters that describe the learning needs of today's college students. The techniques

for identifying students with learning difficulties, diagnosing their problems, and placing them in skills programs are also described. Maxwell keeps the learning skills problem in historical perspective in Part One by reminding the reader that:

We have always had academically weak, poorly prepared college students. Perhaps we have them in greater numbers today, but then, more students are currently attending college than ever before.

Part Two, entitled "Organizing Successful Programs," is composed of four chapters that emphasize ways of organizing learning-support services through tutorial programs and learning centers. Emphasis is given to overcoming problems learning centers face and to present task of evaluating learning centers. Maxwell does not attempt to gloss over subject matter in this section. She does an effective job of describing the difficulties and demands of creating tutoring services and learning centers, and pointing out the variety of services and centers available. Her "Model Tutor-Training Program" described in Chapter Three is impressive.

Part Three, entitled "Solving Special Skills Problems" and containing six chapters, opens with a comprehensive chapter focusing on methods for understanding the characteristics of academically underprepared students. Specific attention is given to programs for helping underprepared students improve their skills in the following areas:

- Improving Writing and English as a Second Language
- Enhancing Reading Skills
- Building Study Skills
- Developing Mathematical Skills, and
- Increasing Science Skills.

A numberless "Chapter" (supposedly chapter thirteen) completes Part Three and is entitled "Conclusion: Accepting Realities and Taking Action." In this chapter, Maxwell lists out an array of influences that affect the problems colleges face today in developing and maintaining effective programs for poorly prepared college students. Those influences include the changes that are occurring in higher education in the United States; each individual institution's standards and goals; the diverse expectations and characteristics of the students themselves; and the attitudes, teaching strategies, and expectations of the faculty. Other significant influences on the kinds of programs colleges offer and their effectiveness, are fiscal realities and the shrinking pool of highly qualified recent high school graduates who choose to attend college.

Part Four is simply entitled "Resources." It contains eight appendixes, a comprehensive list of 575 references, and a complete index. The appendixes contain information about several topics pertinent to the subject of student learning skills. Those topics are arranged in the appendixes as follows:

Appendix A: Frequently Used Tests

This appendix contains a list of 34 tests, divided according to the type of skill being tested, i.e., screening tests, reading tests, diagnostic tests, etc.

Appendix B: Job Classifications for Learning Skills Counselors

This appendix contains a brief summary of the "Learning Skills Counselor Series," including a statement about the minimum qualifications of each.

Appendix C: Difficult Tutoring Situations

This appendix contains a taxonomy offering seven disruptive styles encountered in tutoring situations, common identifying characteristics of each, and suggested approaches to aid in establishing an effective learning relationship with each style.

Appendix D: Sources of Information for Developmental Skills Specialists

This appendix contains a list of 25 journals, newsletters, and yearbooks divided according to subject area, i.e., general interest, reading, writing, etc.

Appendix E: Points of Interference in Learning English as a Second Language

This appendix contains general information about speakers of Asian languages, black dialect, and Spanish with special emphasis on pronunciation, grammar, and spelling.

Appendix F: How to Study Chemistry

This appendix contains a summary of points to be addressed while studying chemistry that include an overall study strategy, notetaking, hints for reading the chemistry textbook, problem solving skills, taking exams, and effective laboratory experiences.

Appendix G: How to Study Physics

This appendix contains material emphasizing the importance of a class overview in physics, effective participation in physics lectures, reading the physics textbook, problem solving in physics, and effective test preparation.

Appendix H: Research and Program Evaluation

This appendix contains an excellent review of the purposes and general methods of program evaluation, and it contains an excellent table showing key considerations in program evaluation.

Improving Student Learning Skills is probably one of the most thorough and comprehensive texts on the market concerning study skills. It is an excellent guide to successful practices and programs for increasing the performance of underprepared college students.

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