

# Do More With Less: Computer Packaging"—One Possibility

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It comes as no news that today is a time when chief student personnel administrators (and their bosses) are being challenged to cut costs, improve efficiency and effectiveness, and yet somehow continue—or even increase—the humanization of institutional services to students.

Student financial aid administration, one such critical service typically supervised by the vice president for student affairs, is rapidly reaching its limits under the traditional methods of individual application processing and award decision making.

About a dozen student financial aid officers in the country now seem to be offering a partial solution in "computer packaging" (award decisions made by computer). They argue that their relationships with students and parents have become more personalized and their work more professional and efficient. One office has even managed to "do more with less" by increasing volume while operating without the

replacement of a professional staff position.

## THE PROBLEMS

The modern era of a need-based student aid program, ushered in by the NDEA of 1958 and expanded in 1965 by the Higher Education Act and 1972 by the Education Amendments to include "packaging" of grant, work-study and loan, has broken (or at least cracked) the financial barrier to higher education. This democratization has precipitated astronomical increases in the volume of aid applications. Many students of higher education project a leveling off and perhaps decreases of enrollments in the 1980's. However, the number and percentage of "needy" applicants is not seen as diminishing, but rather increasing in the future. With continued emphasis on recruitment of minority students, and more aid programs being administered on a need basis (e.g. NCAA awards, Guaranteed Loan Programs, and some state programs), an application analysis and processing "crunch" appears likely if indeed it is not already upon us.

But increases in number are only the obvious concern. The inordinate consumption of time also works more subtle havoc in areas of program evaluation, planning, research, staff morale, professional development, cost reduc-

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tions, and most importantly, in the personalization of the counseling function.

### THE EVIDENCE

1. *Time and Cost.* Preliminary estimates from a study underway by two of the authors suggest several rules of thumb—however unrefined.

a. At many institutions at least one-third of the student population will apply for aid.

b. Each "clean" application (Family Financial Statement or Parents' Confidential Statement without unusual circumstances) can be carefully need-analyzed, award made, and documented in 10-15 minutes. A complicated application could take from an hour to half a day, depending upon the degree of complexity.

c. For every three decisions, one will probably later require revision. As the original award is an "offer," and owing to the changing nature of family financial circumstances, aid officers are frequently requested to revise the analysis before final "acceptance" by the student.

d. Analysis, packaging, and review will usually involve the entire professional staff of the aid office. This is not counting clerical and paraprofessional assistance for file preparation, screening, and correspondence.

e. Professional staff salaries are probably in the range from \$800-\$1,200 per month.

Assuming these as illustrative guides only, a simplistic analysis of a typical university's financial aid application

processing might proceed as follows. Of the 15,000 students, 5,000 apply for aid. Averaging five applications per hour each, the four professional staff will take 333 man/hours, or more than two months full-time (allowing for revisions) to analyze this year's applications. Supposing a \$900/month average salary, the school in the example is paying \$7,200 for processing this year alone.

2. *Program planning and evaluation.* The often quoted "Gresham's Law of Planning" seems to operate just as widely in financial aids offices as other organizations.

"Daily routine drives out planning. Stated less cryptically, we predict that, when an individual is faced with highly programmed and highly unprogrammed tasks, the former tend to take precedence over the latter even in the absence of strong overall time pressure." (March & Simon, p. 185).

Too often in his legitimate concern for one student at a time, the financial aid officer neglects considering how the accumulation of daily, monthly, and annual work is affecting the university and the realization of institutional goals and objectives (see North, 1963). Consider how many studies done by the office of institutional research (on tuition hikes, minority recruitment, out-of-state admission, etc.) could be made more meaningful when incorporating or supplemented by reports, trends, and projections of the student aid program.

USOE panelists who review institutional requests for federal funding often decry the apparent lack of an

institution's knowledge of and compliance with the intent of federal legislation. Without the capability to "tentatively spend" (simulated award announcements on the computer) before award letters are mailed, it is difficult to assess the impact of this year's decisions until annual reports are compiled 12-15 months later. This is especially unfortunate when supplemental appropriations become available to institutions which can justify the negative impact of the current low funding level. A specialized management information system would seem to have a place. The financial aid operation (if considered *only* in its mechanical, rather than human, aspects) is essentially a problem of matching applicants with available funds, while retaining human judgement in consistently made decisions. An evaluation of the aid program ought to speak to the accountability issue via a high degree of confidence in the consistency level.

3. *Staff Morale and Development.* Perhaps not as subtle as implied above, the feeling an aid officer has about the nature of the job permeates his performance. Alienation and loss of identity are not the exclusive ills of students. Under the burdensome workload requiring far too many evenings and weekends, there is little or no time for development of self, educating colleagues as to changes in legislation, impact of programs, etc.

One need not wonder, therefore, why jobs in financial aid administration have been "stepping stone" positions for

"bright young men and women." Traditionally, very few view the field as holding any long range career potentialities, let alone consider returning to the financial aid field once the doctorate is earned.

The inescapable consequences of such over-stressed manual systems are hurried decisions, many errors, bad public relations with parents, brief longevity of aid officers, and poor service to students.

4. *Humanization of Service.* It is indeed ironic that the impersonalization of present "hand-packaging" approach would lead to the computer which is typically conceived of as the exponent of inhumanity. Testimonials in the literature attest to "personalization through computerization" (see especially Menke and Yehle, 1963; Brown, Janes, and Overman, 1967). These authors speak for the expediting of human judgement, not the replacement of it. When the computer is helping, no student is overlooked and attention is assured all who seek it. To be certain, each case with special or unusual circumstances (rarely exceeding 5-10%) should be reviewed by professional staff members. When the other 90-95% are being automatically considered within the pre-established office guidelines, fund limitations, award qualifications, and priorities, one is pleased and confident in individualizing analysis and the *very critical* revision requests.

Most aid officers, usually trained in counseling, psychology, social-psychol-

ogy or other behavioral disciplines, care about their students and want to initiate or expand the *personal* aspects of office service. More attention to student group financial planning sessions (especially with students unfamiliar with handling large sums of money), talks to high school and parent groups, outside fund raising to provide alternatives to "denied" applicants, as well as a larger individual counseling clientele, could result from increased time savings. The need for these kinds of services is certain to increase as the society described by Toffler emerges.

### THE SOLUTIONS

The alternatives do not appear to be numerous. As the numbers of applicants rise, methods of providing fiscally sound, efficient and yet personal service might include (1) increased professional staff, (2) increased and/or more extensive use of paraprofessionals, (3) computer packaging and a "management by exception" approach in which those situations that require special attention are routinely generated and identified.

It is clear in a time of budget cuts, "waste" elimination, and "negative priorities," that alternative number one holds little hope. Alternative two to a lesser extent, but for the same reasons—as well as pressures of current work loads—looks unlikely, however desirable. As educationally and philosophically sound as is the evidence discussed above (program evaluation and planning, staff morale and develop-

ment, and humanization of services) it will be action precipitated by further study of costs and time efficiencies that points the way to computerization of student financial aid decision-making.

Even taking into account the costs of a part-time systems analyst (on or off campus) and/or a programmer, computer time, and different clerical supplies, the conversion to computer packaging may pay for itself in the first year of operation, but surely after the second year. The feasibility is strongly suggested for institutions with more than 3000 applicants and one author (Orwig, p. 14) would still say "yes" for as few as 500.

The speed and accuracy of "computer packaging," while expected, is still amazing. The University of Colorado reported 2,500 packages decided in 15 minutes (Brown, Janes and Overman p. iv) and in the spring of 1971 Illinois State University processed 4,000 applications, packaged 2,100 awards, and produced award letters ready for mailing in 16 minutes. In the spring of 1972, ISU processed 6,000 applications, packaged 1,900 awards, and prepared the appropriate correspondence in 13 minutes. This final run was after seven "simulations" with the profile of recipients, compliance with desired federal and institutional distributions, and assurance of expenditures within funding limitations.

Hopefully these thoughts will create a renewed interest in the possibility of computerization and student data systems in financial aid administration.

Humanization, both for students and staff, should be seen as the greatest advantage rather than a point for scepticism. The possibility of cost reduction, inter-institutional cooperation, and research and development are inviting indeed. "Computer packaging" at least warrants further study.

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