

WHEN THE EMPLOYER FACES DAY CARE DECISIONS:  
COST-BENEFIT ANALYSIS AND OTHER  
DECISION-MAKING TOOLS

Abstract

More and more employers are being asked to make decisions on day care. In public agencies and private business, employers are seeking advice on how to decide whether, and to what extent, to subsidize day care. Traditional cost/benefit analysis is very difficult in the field of early childhood programs and cannot easily be used as a decision-making tool in this area. However, it is useful to review problems in costs, costing, funding and benefits; and many useful hints can be given to the employer who must make decisions on day care.

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WHEN THE EMPLOYER FACES DAY CARE DECISIONS:  
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I have been asked to write an article on cost/benefit analysis of day care. The purpose is to explain why it is difficult to use such an analysis in a formal way to decide whether you, as an employer, want to participate in day care and to suggest points to consider in making decisions on day care. Before I begin, or maybe it is the main part of the message, I want to tell you what happened recently when my erstwhile colleagues and I began a three-year evaluation of a new program to teach parents better care of their children in their own homes.

I have a colleague who sees life rather as it is; one of those who continually asks Emperor's Clothes questions. David and I sat down last year to plan what had been requested as a cost/benefit analysis of an in-home child care program. Our analysis was to compare the home program with Headstart. David began by saying,

"Is it true that there are, on the average, no known, reliably tested, stable, long-term benefits from Headstart that an economist could really use in a cost/benefit analysis?"

"Yes," I said. "The data are inadequate and measurement difficulties are in any case still too great."

"Are these difficulties likely to obtain in our evaluation of the home child care program as well?"

"Yes, I think so," I said.

"Does the home program cost less?" asked David.

"Of course--it's an entirely different program. Most of the inputs are not even monetized, and it's only several hours per week instead of forty or fifty."

"Well," said David, "I can give you an early rendition of our final report due in 1975. Here it is. In comparison to Head-start, the home program is a highly cost-effective way to deliver no (measurable) benefits. But I feel we should point out that there are even more cost-effective ways of delivering no (measurable) benefits....."

So, we come to the use of cost/benefit analysis as a tool for employers who must decide about subsidizing day care. I will begin by stating some premises and definitions, for there can be few fields where definitions and premises are so vague or where so much is alleged on so little evidence.

My own premises in this field are these:

1. Society has a stake in the care of its citizens aged 0-14. These years now represent 20 percent of our human lifetimes and a fourth of the population. I believe we have to do more about the childhood of our citizens for reasons outlined below. In fact, most people believe that we have to do something more and that we are actually making a beginning. The need is such that we will continue to have to act in this area long before we have clear knowledge of

the effects of our actions.

2. However, employers, including governments, have a legitimate, serious interest in the effect of day care programs they affect and/or support. They want to have day care programmers accountable for the money spent on day care. And employers need information for decision-making and setting priorities. This information would be ideally convenient if it could be cast in cost/benefit terms.

In this article I assert that we cannot do worthwhile traditional cost/benefit analysis of early childhood programs because of serious measurement difficulties. However, I would like to examine the cost/benefit rubric to see where it fits in decision-making on day care. This discussion therefore looks first at costs, then at benefits, and finally concludes with recommendations for decision-making on day care.

#### Problems Associated with Costing

As an employer contemplating day care, you will find the service difficult to cost whether you are looking at someone else's program or your own. In particular, you will find it difficult to compare your actual or projected program with someone else's. This is true because of (1) data problems, (2) pricing problems, (3) quality problems, and (4) efficiency problems. These problems are not, however, insuperable and there is nothing mystical about the process!

To deal with data problems, the team I worked with standardizes all programs in the following way. We set costs on the basis of a standard ten-hour day or night, 250 days a year, using "full-time equivalency" units for both children and staff. We reckon average daily attendance (ADA) as well as enrollment (ENR), looking at how many children actually come each day. ADA typically differs from ENR by 10 to 15 percent. Where transportation is involved, ADA frequently differs from ENR by 25 to 30 percent, which obviously grossly affects cost per child per year. (These figures are also important because if you know your ADA-ENR difference, and particularly if the difference is rather stable, you can over-enroll and function at capacity.) We fully-cost, that is, impute a cash value to, nearly all program operations. We impute a cash value to overtime over 60 hours per week and all other indispensable inputs except trustee-director time. Monetization of all major inputs is absolutely critical to decision analysis, since it appears that on the average 15 to 25 percent of all recurrent inputs in day care are in kind.<sup>1</sup>

Finally, to eliminate data problems, recurrent costs must be separated from start-up costs. Day care directors typically think (pragmatically) of start-up costs as "all the front-end costs." Economists and many businesspersons think of start-up costs as amortizable, non-recurring costs associated with program inception and major expansions. These

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<sup>1</sup>See Abt Associates, A Study in Child Care, 1970-71, Cambridge, Massachusetts, 1971, Vol. III. This volume also describes monetization procedures.

concepts are typically very different.<sup>1</sup> Malcommunications on this point produce failures to amortize, inadequate plans for working capital, poor planning for the first year (in which the program typically runs far below capacity), and misunderstandings about how much child care costs. This consideration is especially important when comparing a projected program to franchised programs or to programs, like schools, which are bureaucratically supported by government agencies.

Pricing problems are considerable. They evolve from regional price differences and inflation. Regional price differences mean that the cost of a given program will vary by 100 percent between Mississippi and New York City.<sup>2</sup> Inflation means you should allow for change if you are looking at someone else's figures for an earlier year, especially since your day care costs may be affected by increasingly effective teacher unionization.

After data and pricing problems are settled, you can look at the costing problems associated with quality and efficiency questions. If (and only if) you can hold quality constant, you can look at economies of scale

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<sup>1</sup>For the further discussion of this point, see Rowe, R., et al, Child Care in Massachusetts, the Public Responsibility, Massachusetts Advisory Council on Education, Boston, 1972, Ch. 8. This chapter also presents matrices showing different costs of child care for different types of care and different staff-child ratios.

<sup>2</sup>As indicated by teacher salary difference reported by the National Educational Association. A regional salary index can be found in R. Rowe, et al, op. cit. and Abt Associates, op. cit.

and other efficiencies.<sup>1</sup> In fact, if we could hold quality constant, we could look at cost-effectiveness without having to monetize benefits (a problem discussed below). Or if we could control for efficiency amongst programs, we could look for changes in benefits (quality) for different levels of inputs. This, however, is very difficult, for what appears to one person as efficiency appears to another person as a drop in quality. The quality-efficiency discussion therefore forces us to consider the question of whether we can objectively determine benefits.

#### Problems Associated with Determination of Benefits

In determining the benefits associated with child care, we typically discover serious problems of reliability, and validity, of benefits discussed in different coinages and of incomplete coverage of benefits by evaluators. This means that the employer who wants to look at benefits from other programs might want to ask the following questions. With respect to reliability and validity, would we get the same results if we re-measured the benefits? Are we reasonably sure that the "effects" of a day care program can really be attributed to the program? (Some alleged "effects" have been shown not even to be correlated with day care, and of course even reliable correlations may or may not indicate causation or the direction of causation.)<sup>2</sup>

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<sup>1</sup>There is a discussion of economics of scale in Ibid. Many child care specialists think that larger programs offer different, and perhaps lower, quality than small programs, so it is difficult to allege that substantial economies of scale exist in child care.

<sup>2</sup>I am reminded of the Washington administrator who commented that day care must break up families since about half the users of centers, though not of child care in general, are single parents.

Are we measuring what we would like to measure and comparing our results with the appropriate yardsticks? With respect to benefits discussed in different coinages, how can we compare benefits if they cannot all be monetized? And with respect to the coverage of benefits, one wants to ask, did the evaluator look at the following?

- o long-term effects as well as short-term effects (over one year as well as under one year)
- o unintended as well as intended effects
- o damages, if any, as well as benefits and costs ( hereafter, we use the word "benefits" to mean both positive and negative effects)
- o benefits accruing to children, employees and the community as well as to the business or agency which subsidizes the child care (interactive and indirect effects may be considered particularly important)
- o the effects of having "no program" (under circumstances where the effects of "no program" may be rapidly changing) or of having a very different program. That is, did the evaluator measure the opportunity cost of his or her program?

As it turns out, available information on all these points is inadequate. Very few employers have provided child care, or subsidized child care, for periods over two or three years. (World War II day care, which



may have affected 80,000 to 100,000 children, was never subject to long-term evaluation so far as I know.) Long-term child care programs are very few, and in no case that I know of have employer benefits been analyzed over a period as long as 15 or 20 years. Few long-term effects on children have been demonstrated from any kind of care which is above the level of abuse.

Unintended effects are rarely tracked in day care, perhaps because they occur in large part to children, who have no real lobby, and because they are inherently difficult to track, especially over time.<sup>1</sup> Also, people who are interested in child care rarely deal with all the relevant constituencies. Employers look at labor turnover and absenteeism; child specialists and parents look at achievement gains in children; few evaluators look at all the groups directly affected by day care, let alone groups indirectly affected. The same factors obtain with respect to discovering negative as well as positive effects and with respect to interactive and indirect effects. Such effects are very difficult to measure and are very rarely considered formally. It is, however, important to raise such issues since many day care program decisions are actually made on the basis that someone believes "day care will affect family life" or "day care will increase unemployment as women join the paid labor force" or "day care will break the poverty cycle."

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<sup>1</sup>The concept of selective perception suggests that it is very difficult to design evaluations which include unintended effects and yet in human services such effects are most important to decision-makers. One may suggest the case of disbanding OEO, which some people believe has occurred because OEO was too effective in organizing, and raising, expectations in poor communities.

Although child care has been or is being supported by KLH, telephone companies, Levi Strauss, Singer, Federal Government agencies, Control Data, Avco, TRW, unions, Eastman Kodak, the Detroit Free Press, a few textile companies, dozens of universities and hospitals, and others, and although detailed studies are and have been made by these employers and by hundreds of child development specialists,<sup>1</sup> the evidence for benefits from

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<sup>1</sup>Individual corporations are usually very willing to share their experience with interested inquirers. Among the most useful discussions of benefits from child care are:

Auerbach Corporation, "An Appraisal of the WIN Program," a report prepared for the Department of Labor, 1970.

Bereiter, Carl, "An Academic Proposal for Disadvantaged Children: Conclusions from Evaluation Studies," a paper presented at the Johns Hopkins University, February, 1971.

Curran, Joseph R., and Jordan, John W., The KLH Experience: An Evaluative Report of Day Care in Action, Cambridge, Massachusetts, 1970.

Inner City Fund, Potential Cost and Economic Benefits of Industrial Day Care, a report prepared for the Department of Labor, May, 1971, and Employer-Subsidized Child Care, a report prepared for the Department of Health, Education and Welfare, 1972.

Northside Child Development Center, Annual Report, a report prepared for the Greater Minneapolis Day Care Association, 1162 North 5th Street, Minneapolis, Minnesota 55401, 1972. This report covers day care subsidized by Control Data Corporation, Dayton's, Farmers and Mechanics Bank, Federal Reserve Bank of Minneapolis, Lutheran Brotherhood Insurance Co., Northern States Power Company, Northwestern Bell Telephone Co., and Pillsbury Company.

White, Sheldon, "Federal Program for Young Children: Review and Recommendations," a report prepared for the Department of Health, Education and Welfare, 1972.

Continued on next page

child care is inconclusive. It would probably be fair to summarize these studies with the following statements:

- o Child care arrangements appear to be a necessary but not sufficient factor in permitting parents to join the paid labor force (or training programs), in reducing absenteeism and turnover, and in raising labor productivity.<sup>1</sup>
- o Provision and/or subsidy of child care for employees and trainees (partial or complete) can sometimes be shown to be beneficial to employers in hospitals and universities and appears to be beneficial in Minneapolis.<sup>2</sup> Employees with special skills or characteristics, and employees for whom day care has special ideological significance,

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Ditmore, Jack, proposed O. E. O. Planning, Research, and Evaluation Working Paper entitled, "A Study of Day Care's Effect on the Labor Force Participation of Low-Income Mothers, Washington, D. C., 1973.

Krug, Doris N., Palmour, Vernon E., and Bellassai, Marcia C., Evaluation of the Office of Economic Opportunity Child Development Center, prepared for the Office of Economic Opportunity by Westat, Inc., December 1972.

<sup>1</sup>See the two Inner City fund studies cited, the two OEO studies cited, and the forthcoming review on this point by Rick Tropp in a report prepared for the Department of Health, Education and Welfare, Office of Child Development. The forthcoming OEO study is perhaps the most encouraging in its view of positive gains from day care to low-income mothers.

<sup>2</sup>The recent report from the Northside Child Development Center in Minneapolis is probably the most encouraging from the point of view of showing effects on turnover, absenteeism and labor productivity in participating firms. This report may be taken with caution since the program in Minneapolis is new and Pygmalion and Hawthorne effects may be present. On the other hand, positive effects are encouraging wherever demonstrated.

are the groups whose responses are generally most easily be shown to be beneficial to employers. This statement does not necessarily mean that other employers should despair of benefits from day care--only that the effects of day care are difficult to measure. That is, it is difficult to find clear-cut industrial benefits from child care except where providing day care completes the provision of conditions that are individually necessary but not sufficient to improving labor productivity. This situation is most likely to obtain for workers or trainees with special skills and views on child care.

- o Parents in the paid labor force and in training consistently report that day care is very important and that they feel public and private funds should be used to help them.<sup>1</sup>
- o A great many community groups feel that day care is a critical issue, and that employers and government must assist in providing adequate service; polls frequently find a majority of respondents feel day care subsidy is desirable for at least some groups in the population.<sup>2</sup> Arguments raised by these groups are many and varied. Many national organizations believe that day care is

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<sup>1</sup>See, for instance, the detailed poll on this topic reported in Rowe, R., op cit.

<sup>2</sup>See, for example, the list of fifty-four national organizations backing the Child Development Bill of 1971 and the findings on this point by Gallup, Harris and Becker polls.

essential to equal employment opportunity for women. Others, including the present Administration, believe that day care is essential to reducing welfare rolls (although not a sufficient measure by itself). Many believe that adequate child care support improves family life and lifestyle options of both men and women. (Proponents of this view often point to statistics such as that from Massachusetts [1971] which found that only 4 percent of parents of preschoolers had any nonparental adult living with them.) Dozens of groups support child care on grounds of benefits to children, ranging from improvements in school readiness to improved health care.

- o Available, but grossly insufficient, evidence suggests that day care<sup>1</sup> and the paid employment of parents are not, per se, demonstrably beneficial or damaging to most children.<sup>2</sup> Precisely put, this means that we cannot yet demonstrate stable, long-term effects on children from adequate day care. In part, this is because we cannot yet measure even cognitive gains, let alone social and emotional

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<sup>1</sup>That is, day care which is above the level of abuse.

<sup>2</sup>For example, see Howell, Mary C., "Studies of the Lives of American Families: Mothers in Paid Employment," draft for publication dated January, 1973, Cambridge, Massachusetts, for the most recent comprehensive review of the hundreds of studies on these questions. See also my "Finding the Way to Love and to Work," to be published in Talbot, Nathan B., et al, Raising Children in Modern Urban America, for an analysis of the methodological deficiencies in the data which are available.

changes, in ways that experts agree on. In part, this is because measuring the effects of day care constitutes variation on a small theme. Day care accounts for only a small proportion of the variance in child behavior and must be viewed together with health, climate, heredity, family life, etc. And, finally, children are adaptable to a wide range of nonabusive environments and child-rearing patterns.

Despite inconclusive evidence on long-range effects of day care, many people simply believe that day care would benefit some, if not all, children. For instance, very large numbers of young children--perhaps 10 percent--are regularly left alone by their parents. I estimate that at least 10 percent are malnourished, diseased, abused, need special care or are living with rats. Probably most people believe that day care (and attendant health care) would be preferable, both for the immediate happiness of the children involved and for long-term reduction in social costs. Likewise, many child care programs are stultifying, regimented, understaffed. Many people would prefer better programs.<sup>1</sup> In sum, however, across the board, as we look at the scattered evidence available, it is not easy to support allegations of good or harm from day care per se.

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<sup>1</sup>For an example of all the views above, see Keyserling, Mary D., Windows on Day Care, National Council of Jewish Women, 1 West 47th Street, New York, 1972. This book reports visits by Council members to child care programs all over the country.

### A Suggested Plan for Decision-Making by Employers on Day Care

If data and methodological problems are severe, for both cost and benefit analysis in child care, how should the employer go about making decisions about day care? First, does he or she want to subsidize to any extent the child care arrangements of his or her employees and potential employees? If so, how much? If a subsidy is made, how can the employer see that funds are efficiently spent? Who should provide the day care? What kind and quality of child care should be subsidized? How can the employer find out at least some of the effects of the day care program?

#### What Should the Employer Do First?

First steps in day care decision-making include familiarity with day care programs of similar employers, and serious survey of employees and the local community. Some senior person in the agency or firm should be delegated to talk at length with several similar employers who participate in day care programs. Long discussions should be planned with local day care providers, on Title IV-A and other funding sources, on licensing, and on the availability of directors and staff.<sup>1</sup> Child care budgets should be studied,<sup>2</sup> with particular attention to start-up costs, and to the fact that nearly all good child care programs meet their needs from multiple sources. Careful review of available resources must be made. Ordinarily, the most important sources of support

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<sup>1</sup>The local Day Care and Child Development Council depository will provide many day care materials and contacts. The nearest depository may be found by contacting the Day Care and Child Development Council of America, Inc., 1401 K Street NW, Washington, D. C. 20005.

<sup>2</sup>Several are published in Rowe, R., op cit, Chapter 8.

are Federal, state and local governments, other employers, community agencies and religious organizations, volunteers, "free" resources like school lunches and Medicare, and parent fees. A great many good programs use all these sources. If volunteers are to be used, there must be a central volunteer coordinator with imagination to find Foster Grandparents, Veterans Hospital convalescents, high school students, work-study students, Department of Labor trainees, Scouts, etc. Indoor and outdoor space is usually a major problem and must be planned with meticulous care, in conjunction with transportation.

All of this reconnaissance should be conducted simultaneously with a survey of present and projected demand. The minimum critical elements of a demand survey are: a description of present arrangements used by present and potential employees, present and desired hours of care, ages of children in care, care of siblings, type of care (in home or out of home or both--mixed, home-care-center-care system). In addition, the employer requires information on family size, family income, distance of employee homes to projected day care program sites.<sup>1</sup> Most demand surveys fail because of insufficient data in one of these areas. These data will determine the size, scope and location of program(s) and the sliding fee scales which will permit parents to participate and/or permit program costs to be met. (The latter two

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<sup>1</sup>Demand survey instruments developed by this author and her team are available free from Mr. William Prosser, Office of Economic Opportunity, 1200 Nineteenth Street, NW, Room B-640, Washington, D. C. 20506.



conditions may or may not coincide, depending on family incomes and other sources of funds.)<sup>1</sup>

This reconnaissance may sound intimidating but the process is easier than it appears since most communities have knowledgeable volunteer organizers. The process should not be considered mystical but it is time-consuming; I have never seen a good program begin with less than an aggregate person-year of effort.

#### Planning the Employer's Participation

The analysis produced in Stage One should provide the employer with many basic answers. He or she will decide to support child care on the basis of perceived benefits. Ordinarily, the analysis will clearly suggest the basis for refusal to support child care if that must be the decision. A positive decision will nearly always be a matter of degree--the employer will partially support a program. For in-house programs this support commonly includes organizational planning, space, utilities, maintenance, and often bookkeeping. (This covers many startup costs and 10 to 30 percent of the recurrent budget.) For out-of-house participation the employer will often provide vouchers, flat sums per child, payments to providers<sup>2</sup> (including babysitters), or collaborates

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<sup>1</sup>A computer model which delivers fee scales for hundreds of different conditions of supply and demand is available from Abt Associates, 55 Wheeler Street, Cambridge, Massachusetts. See also Sliding Fee Schedules and Child Care under H. R. I. by the author, David Warner and James Botkin, Abt Associates, July, 1972.

<sup>2</sup>Interestingly enough, my experience indicates that most employees do not object to a differential benefit to parents unless the support is very substantial per employee.

with many other agencies in supporting a major program. The in-house, out-of-house decision is usually made first of all on the basis of distance from employee homes and schools. In my experience the level of support offered by employers averages 10 to 20 percent of the recurrent costs of care in good centers (\$200 to \$400 or more per child-year) but varies very widely by circumstance. The answer to "who should supply the day care?" is also usually provided by transportation and age-of-child analysis. For instance, if there are many infants needing care (as in a university community) and if transportation difficulties are great, the employer may well decide to support a family day care, or mixed, home-care-center-care system.<sup>1</sup>

The kind of child care that should be provided is thus often indicated to the employer by a careful demand analysis. The quality that should be subsidized is a difficult problem. My own advice to employers is to read the 1972 Federal Inter-agency Day Care Requirements from the Office of Child Development in H. E. W. These draft Requirements succeeded somewhat tougher Federal Interagency Guidelines which are also worth reading for their superior policy on parent participation. Neither of these documents has been enforceable law, even for Federally supported programs, but they outline a minimum quality level which I find persuasive.<sup>2</sup> Cost levels associated

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<sup>1</sup>It may be well to note that many parents very much want their school-age children to join their preschoolers after school and therefore want child care in-home or close to home.

<sup>2</sup>The FDCR of 1972 were written to "approve" in-home care by relatives on grounds of supporting parental influence and family cohesion. I basically like this provision and support employers who wish to reimburse part of the cost of such child care arrangements.

with these Guidelines are discussed in materials previously cited.<sup>1</sup>

How to See That Funds Are Efficiently Spent  
and to Track Some of the Effects of a Program

In the absence of traditional cost-benefit analysis, most employers opt for cost-effectiveness analysis. Since 70 to 80 percent of the costs of child care lie in staff salaries, since staff-child ratios are spelled out clearly in the FDCR, and since teacher salaries in a given region are ordinarily well-known, center care budgets are relatively easy to keep track of (if adequate records are kept).

One major tool in day care cost-effectiveness analysis is a functional budgeting system. Simple and sophisticated techniques for functional budgeting are readily available.<sup>2</sup> Functional budgeting provides a way to compare your program with typical "good" programs of all kinds and demonstrates quickly where support money goes. This provides an opportunity for the employer to see if he or she approves of the program inputs. In the absence of

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<sup>1</sup>See also excellent estimates by Don Ogilvie of the Inner City Fund made for H. E. W. in 1972. I discuss some adjustments in his estimates in "What is Good Child Care Worth?" in Inequality in Education, No. 13 (December 1972), pp. 13-16.

<sup>2</sup>A simple rule of thumb system for small and/or unsophisticated programs is outlined in the Abt Associates Study, (op cit). A very detailed system is in McClelland, Keith, Day Care Cost Analysis: A Manual of Instruction, Welfare Council of Chicago, Planning and Research Division, 64 East Jackson Boulevard, Chicago, Illinois 60604, Publication No. 4017, July, 1971.

cost/benefit analysis, day care quality is, to some extent, in the eye of the beholder; an opportunity to compare inputs with those of many other programs permits a flexible "handle" on cost-effectiveness. <sup>1</sup>

Tracking the effects of a going program is both difficult and easy. On the difficult side one may refer to the technical problems of objective measurement noted above. Most employers keep track of absenteeism, turnover and labor productivity and then turn from objective to subjective indicators.

Subjective evaluation of child care is beginning to be formalized and developed. The basic pattern is to develop a continuous feedback loop of reactions from parents, staff, director, and interested members of the community. Elaborate methods for doing this have been tried and are being developed. <sup>2</sup> Common sense methods are relatively simple. If parents are appropriately represented on policy boards and as program supporters and if a teacher-parent child evaluation system is set up, the first elements of a feedback loop are present. In practice, a board can simply ask the director and staff to evolve an idiosyncratically appropriate system to assure that everyone associated

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<sup>1</sup> Budgets for twenty different kinds of centers and systems are presented in the Abt Associates Study (op cit). They are summarized in Vol. I and presented singly in the twenty case studies of Volumes IIa and IIb.

<sup>2</sup> See, for instance, an unpublished doctoral dissertation by Golub, Wendy L., "A Case Study in Formative Evaluation," Harvard Graduate School of Education, Cambridge, Massachusetts, 1971, filed as G584, Gutman Library, Harvard University.

with a program will keep noting his or her reactions to the program.

For the employer himself or herself, how can one gauge a program's success? The employer should certainly visit the program often enough so that the visits are not tension-producing. My own rules of thumb are these on a visit: Is there a lot of crying? Do any children appear withdrawn over time? Is crying or withdrawal quickly responded to? If children and staff appear generally busy and happy, alone and together; if space is being thoughtfully used; if meal and snack times have an easy, home atmosphere, I am likely to think the program a good one. Particularly happy signs are children helping each other, food preparation with children, relative disinterest in the visitor (unless he or she is known). Employers should also make some effort to stay directly in touch, off and on, with participant staff and parents. Incipient trouble will be averted--and the employer is likely to feel deeply rewarded.

In summary, then, we have reviewed many basic elements in employer decision-making on child care. The process requires time and work. There is nothing vague about our understandings of child care; the key is, rather, a recognition and method for dealing with diverse needs and values in this area. A traditional, rigid cost-benefit analysis cannot be performed. However, flexible, well-informed decisions can be made and participation in child care can be very rewarding for employers and all others concerned.

## BIBLIOGRAPHY

- Abt Associates, A Study in Child Care, 1970-71, Cambridge, Massachusetts, Budgets for twenty different kinds of centers and systems are summarized in Volume I and presented singly in the twenty case studies of Volumes IIa and IIb. Volume III describes monetization procedures.
- Computer model which delivers fee scales for hundreds of different conditions of supply and demand.
- Regional salary index.
- Outline for simple rule of thumb budgeting system for small and/or sophisticated programs.
- Auerbach Corporation, "An Appraisal of the WIN Program," a report prepared for the Department of Labor, 1970.
- Bereiter, Carl, "An Academic Proposal for Disadvantaged Children: Conclusions from Evaluation Studies," a paper presented at the Johns Hopkins University, February, 1971.
- Curran, Joseph R., and Jordan, John W., The KLH Experience: An Evaluative Report of Day Care in Action, Cambridge, Massachusetts, 1970.
- Day Care and Child Development Council of America, Inc., 1401 K Street NW, Washington, D. C. 20005. For names of nearest depository.
- Ditmore, Jack, "A Study of Day Care's Effect on the Labor Force Participation of Low-Income Mothers," proposed OEO Planning, Research, and Evaluation Working Paper, 1973.
- Golub, Wendy L., "A Case Study in Formative Evaluation," unpublished doctoral dissertation, on file at Gutman Library, Harvard University (G584), 1971.
- Howell, Mary C., "Studies of the Lives of American Families: (1) Mothers in Paid Employment," drafted for publication, January, 1973, Cambridge, Massachusetts. Comprehensive review of hundreds of studies.
- Inner City Fund, Potential Cost and Economic Benefits of Industrial Day Care, a report prepared for the Department of Labor, May, 1971.
- Employer-Subsidized Child Care, a report prepared for the Department of Health, Education and Welfare, 1972.
- Keyserling, Mary D., Windows on Day Care, National Council of Jewish Women, 1 West 47th Street, New York, 1972. Report of visits by Council members to child care programs all over the country.

Krug, Doris N., Palmour, Vernon E., and Bellassai, Marcia C.,  
Evaluation of the Office of Economic Opportunity Child Development  
Center, prepared for the Office of Economic Opportunity by Westat,  
Inc., December 1972.

McClelland, Keith, Day Care Cost Analysis: A Manual of Instruction,  
Welfare Council of Chicago, Planning and Research Division, 64 East  
Jackson Boulevard, Chicago, Illinois 60604 (Publication #4017),  
July, 1971. A very detailed system.

Northside Child Development Center, 1972 Annual Report, prepared for the  
Greater Minneapolis Day Care Association, 1162 North 5th Street,  
Minneapolis, Minnesota 55401. This report is probably the most  
encouraging from the point of view of showing effects on turnover,  
absenteeism and labor productivity in participating firms. The  
program is new and the report may be taken with caution.

Ogilvie, Don, Inner City Fund. Excellent estimates made for the Department  
of Health, Education and Welfare, 1972.

Prosser, William, Office of Economic Opportunity, 1200 Nineteenth Street NW,  
Room B-640, Washington, D. C. 20506. Source of demand survey  
instruments developed by Rowe, Mary, et al.

Rowe, Mary P., Warner, David, and Botkin, James, Sliding Fee Schedules  
and Child Care under H. R. I., Abt Associates, Cambridge, Massachusetts,  
July, 1972.

"Finding the Way to Love and to Work," to be published in Talbot,  
Nathan B., et al., Raising Children in Modern Urban America. An  
analysis of the methodological deficiencies in the data which are available.

"What is Good Child Care Worth?", Inequality in Education, No. 13  
(December 1972), pp. 13-16.

Rowe, Richard, et al., Child Care in Massachusetts, the Public Responsibility,  
Massachusetts Advisory Council on Education, Boston, 1972.  
Chapter 8, "The Costs of Child Care: Money and Other Resources  
Required," presents matrices showing different costs of child care for  
different types of care and different staff-child ratios, pps. 8-1 to 8-61.  
Also, in Chapter 8, several child care budgets.

Rowe, Richard, et al, continued

Regional salary index.

Discussion of economics of scale.

Detailed poll of parents in the paid labor force and in training indicating the importance of public and private funds for child care.

Tropp, Rick, review of studies indicating child care is necessary in permitting parents to join the paid labor force, in reducing absenteeism and turnover, and in raising labor productivity, prepared for the Department of Health, Education and Welfare, Office of Child Development.

White, Sheldon, "Federal Program for Young Children: Review and Recommendations," a report prepared for the Department of Health, Education and Welfare, 1972.