

Measuring Unreported Costs in Child Care and Early Education Programs

FREDERIC B. GLANTZ

Abt Associates Inc.

INTRODUCTION

From an Economist's point of view, costs and expenditures are not synonymous. Costs refer to the market value of all resources used in the delivery of a service (e.g., child care), whereas, expenditures simply refer to cash outlays. Child care research has long recognized that a child care center's annual statement of income and expense for the most part include only expenditures and do not capture the value of all resources used by a center (Coelen, Glantz, & Calore, 1978). One of the challenges in child care and early education research is to properly measure the full costs of providing quality child care and early education. Full costs include both costs incurred by a program and reported on its statement of income and expense, as well as the value of in-kind contributions (e.g., volunteer labor and donated space) and, for programs that are part of a larger organization (e.g., a public school system or a Head Start delegate agency), costs incurred on behalf of the target program by the larger organization. This paper discusses the methodological issues involved in identifying and assigning an appropriate market value to the unreported costs incurred in the operation of early childhood programs.

IDENTIFICATION OF RESOURCES USED

The identification of the resources used by an early childhood program is largely a matter of detective work, the difficulty of which is directly related to the complexity of the organizational structure of the program. The simplest case is that of a free-standing, independent program that is not part of a larger organization. At the other extreme are early childhood programs that are part of a large complex organization. Each is discussed below.

Independently Operated Early Childhood Programs

Identifying all of the resources used by a program.

The first step in identifying the hidden costs of operating an independent early childhood program (such as an independent child care center) is a careful review of the program's annual statement of income and expense with the program's director, financial officer, or accountant.

This review should identify what is and what is not included in each line-item.¹ The review also helps to identify missing cost items (e.g., depreciation of capital equipment) as well as items that should not be included in current operating costs (e.g., the total cost of a capital expenditure or mortgage payments on the facility). Under generally accepted accounting practices, capital equipment (including buildings) must be depreciated over their useful life expectancy (specified in IRS tables) and only the current year's depreciation is included as a current operating cost. Estimating depreciation is not difficult; it requires an inventory of the program's equipment, its cost, and year acquired.

The second step is to identify any volunteer labor and in-kind contributions received by the program during the year. This requires a series of straightforward questions. The Cost, Quality and Child Outcomes Study (Morris & Helburn, 1997) did an outstanding job of identifying volunteer labor and in-kind contributions. The instruments from this study can be easily adapted for use in other early childhood cost studies.

Assigning a value to in-kind contributions

The third step is perhaps the most difficult (and politically controversial)—assigning the appropriate value to volunteer labor and in-kind contributions. The appropriate value of in-kind contributions is the prevailing market value of the resources received in-kind. This requires that the researcher obtain estimates of the prevailing market value from outside sources. For example, if a parent donates accounting services to the program, the hours of service received should be valued at the going rates for accountants. However, if the same parent volunteers some time to help paint the building, then the hours of service received should be valued at the going rate for painters in the area.

While most cost studies at least attempt to obtain the prevailing market value of in-kind contributions, few apply a market test to the in-kind contributions. It is not enough to identify what the program would have had to pay for the in-kind contributions if they purchased them; the researcher must ask if the program would have purchased these resources had they not been donated. For example, a Head Start center may be given the use of a 4,000 SQFT church basement with a rental value of \$4.00/SQFT. Suppose that the center has a planned enrollment of 35 FTE children. This works out to 114 SQFT/FTE child. In the absence of a market test, the assigned value of this donated space would be \$16,000 (i.e., 4,000 SQFT @ \$4.00/SQFT). If, in the absence of donate space, this Head Start center would have used only 60 SQFT/FTE child, then including the entire 4,000 SQFT substantially overstates the real value of the in-kind contribution to the center. Applying a market test to the contribution, the researcher would only include the value of the amount of space the center would have purchased (or rented). The proper imputed value of the donated space in this illustration is \$8,400 [i.e., (35FTE children)(60 SQFT/FTE child)(\$4.00/SQFT)].

¹ This review also allows the researcher to convert the expense statements from different programs into a common format that facilitates comparisons across programs.

Foregone wages

While caregivers in child care centers and other early education programs typically receive relatively low wages (given their education and training), this situation reflects the reality of the labor market. The National Association for the Education of Young Children (NAEYC) has long argued that the full cost of care should include the foregone wages of caregivers. However, since caregivers choose to work in the early education field and accept the prevailing (low wages) there are, in fact, no foregone wages to consider in the cost estimation. If a caregiver is able and willing to work in another field, and jobs are available in that field, she would presumably take the higher paying job and leave early education (witness the exodus of many math and science teachers from education to the private sector in the 1970s and 1980s). The argument for including such foregone wages in the full cost of care is subjective and does not meet the economist's market test.

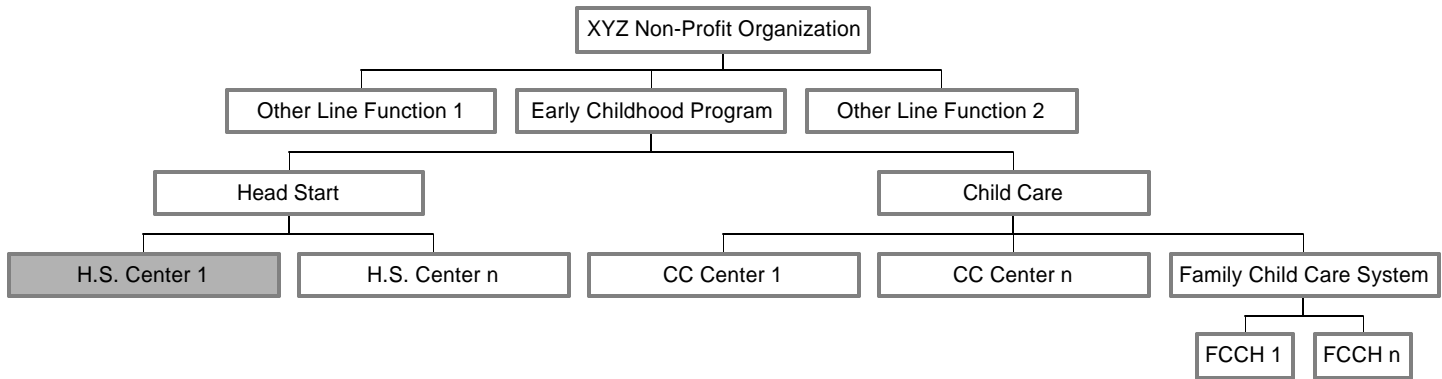
Early Childhood Programs that are Part of Larger Organizations

Many early childhood programs are part of a larger organization. For-profit centers run by chains are but one example. In the non-profit sector, child care centers are often one component of a multi-service agency (e.g., centers run by the YMCA or Head Start Centers run by a school district). As a unit within a larger organization, such a center may be viewed as a cost center for which the larger organization chooses to accumulate and report operating costs. Full-cost accounting requires that the researcher include the cost of all resources used by a center. This includes costs incurred by the larger organization in support of center operations. These latter costs may or may not be charged to the center.

Exhibit 1 illustrates the organizational structure of a hypothetical non-profit organization that includes several different line functions in addition to a multi-faceted early childhood program (Head Start centers, child care centers, and a family child care system). While all of the issues discussed above in the context of independent early childhood programs also apply to such programs that are part of a larger organization, here there is an additional issue of identifying the costs incurred by the larger organization in support of its early childhood program but not charged to that program's budget (and thus not appearing on the annual expense statement of the early childhood program).

In some cases, these costs may be captured by an indirect cost rate and included in the costs reported on a center's statement of income and expense. In other cases, centers may be charged a fee-for-service for the support received from the larger organization, in which case they will be reported on the center's statement of income and expense. However, in many cases, the larger organization makes no attempt to capture these costs, in which case they are not reported on the center's statement of income and expense. Most studies, including the Cost, Quality and Child Outcomes Study (Morris and Helburn, 1997) included costs incurred by the larger organization only to the extent that a center was charged (either directly or indirectly) for these support services. However, failure to capture such costs seriously underestimates the cost of operating early childhood programs. Methods for estimating the costs incurred by the larger organization are described in Glantz, Logan, and Battaglia (1992).

Exhibit 1
Early Childhood Program as Part of a Larger Organization



Dealing with Consolidated Financial Statements

Yet another complicating factor in measuring the full cost of early childhood programs that are part of a larger organization is that such organizations often use consolidated financial statements rather than maintaining separate financial statements for each operating unit. Suppose, for example, that we are interested in estimating the full cost of operating XYZ Non-Profit Organization's Head Start Center #1. There are several possibilities that the researcher may have to deal with: (a) a single consolidated financial statement for the XYZ Non-Profit Organization as a whole; (b) separate consolidated financial statements for each line function, including one for the entire early childhood program; (c) separate consolidated financial statements for major units within each line function (e.g., separate consolidated statements for Head Start and Child Care; and (d) separate financial statements for each individual operating unit (i.e., each Head Start center, each child care center, and the family child care system). In the best case scenario there is a separate financial statement for Head Start Center #1. If this is not the case, then it is necessary to use some method of pro-rating the costs of each level's consolidated statement to the operating units below it. Space precludes a detailed discussion of the various methods one might use to disentangle Head Start Center #1's costs from higher level consolidated statements. Suffice it to say that there is no inherently correct method to do this (Shillinglaw & Meyer, 1983).

REFERENCES

Coelen, C., Glantz, F., and Calore, D. (1978). Day care centers in the U.S.: A national profile 1976-1977. Cambridge, MA: Abt Associates Inc.

Glantz, F.B., Logan, C.W., & Battaglia, M. (1992). Child nutrition meal cost methodology study. Washington, D.C.: United States Department of Agriculture, Food and Nutrition Service.

Morris, J. & Helburn S. (1997). Child care centers: Data set documentation manual. Denver, CO: Economics Department University of Colorado, Denver.

Shillinglaw , G. & Meyer, P.E. (1983). Accounting: A managerial approach. Homewood, IL: Richard J. Irwin, Inc.