A survey of day care needs of M.I.T. employees, its resulting information, and a description of the pilot program of day care services undertaken by M.I.T. are included in this report. A survey was administered to all 4,650 Institute employees in April, 1970, and enjoyed a 35% rate of response. The compiled data supports the conclusion that a number of employees could use a day care program for their children. Enrollment in the pilot program and establishment of a waiting list puts the present demand at about 50 employees. In a cost-sharing pilot program, M.I.T. employees enroll their children in the nearby KLH Child Development Center at fees based on individual family incomes instead of the full KLH fee. On the average, the Institute subsidizes two-thirds of each fee. The program cost for 15 children totals $28,000, of which the Institute contributes $20,000. The success of the program to date and increasing demand for day care services suggest an expansion of the program to a total of 25 subsidized places at the KLH Child Development Center, at an additional annual expense to M.I.T. of $6,000 to $9,000. The Institute should also assist citizen groups in starting new day care programs. Appendix A is a copy of the survey form, and Appendix B is a suggested letter for ineligible respondents. For related document, see PS 006 329.) (KM)
RESEARCH AND DEMONSTRATION PROGRAM OF DAY CARE SERVICES
FOR M.I.T. EMPLOYEES

INTERIM REPORT

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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M.I.T. Planning Office

April, 1971
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ACKNOWLEDGEMENTS

The Ad Hoc Advisory Committee on Day Care at M.I.T. gave valuable advice and guidance which contributed greatly to the successful implementation of the pilot program. The impressive amount of time and careful thought of the members of the working subcommittee assured this success. The Committee's membership follows. Members serving on the working subcommittee are starred:

Office of the Chairman: Walter Milne*
Office of the President: Constantine Simonides
Office of the Provost: Louis Menand
Office of Opportunity Development: James Allison*
Medical Department: Jacqueline Buck
Personnel Office: John Carley
Dorothy Blair*
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The Planning Office is particularly grateful to Mrs. Kate Bulls LaFayette, Director of the KLH Child Development Center, and her assistant, Mr. Andrew Nuquist, for their continuing guidance, assistance and patience.

Special appreciation is extended to the participating
parents whose cooperation and understanding were the source of real encouragement.

The ultimate appreciation goes to Aija, Carl and Eric, Dana, Pam, Andrea, Regina and Christopher, Randy, Theresa and Renee, Calvin, Christine, Leslie, and Catherine, without whom this program really would not be possible.

Mrs. Janet Bond Arterton, Planning Assistant for Community Development, assumed responsibility for researching and writing this report, and coordinating this program.

O. Robert Simha
Planning Officer
This report serves as a starting point in describing the need for day care services among the M.I.T. non-staff employee group which constitutes about 31% of the entire Institute population. The report includes a discussion of a survey design, its resulting information, and a description of the pilot program of day care services undertaken by M.I.T.

The survey was administered to all 4,650 Institute employees in April, 1970, and enjoyed a 35% rate of response. The compiled data supports the conclusion that there is a sector of the present M.I.T. employee population who could use a day care program for their children. The statistical upper limit of this group may be approximately 300 employees with 500 eligible children. These figures in no way estimate how many would use such a program. Enrollment in the pilot program and establishment of a waiting list suggest the presently articulated demand for day care services at about 50 employees.

In the cost-sharing pilot program of day care services, M.I.T. employees enroll their children in the nearby KLH Child Development Center at fees based on individual family incomes, instead of the full KLH fee of $37.50 per week per child. On the average, the Institute subsidizes two-thirds of each fee. The program cost for 15 children totals $28,000, of which the Institute contributes $20,000.

From the several months of operational experience with the pilot program, it has become evident that the Institute
should continue its commitment to providing day care services for its community as a program which is already becoming an integral part of other on-going employment and personnel operations at M.I.T.

In addition, because of the participating employees' satisfaction with the program, the Institute should consider ways to expand the service to other employees and to the entire M.I.T. community, which is increasingly expressing its desire for such services. Continuation of the cost-sharing arrangements with presently participating employees for as long as they want their children enrolled is considered the minimal acceptable level of involvement. If all the participating employees enroll their children through kindergarten, an additional $18,000 will be required from the Institute over a two-year period.

However, the success of the pilot program to date justifies a larger continuing commitment of Institute funds. A suggested optimal scope of the contract with the KLH Child Development Center would be the provision of 25 subsidized places open to the entire Institute community. If the majority of these 10 new places are filled by faculty and staff children, the additional annual expenditure for M.I.T. would be from $6,000 to $9,000.

Furthermore, new residential developments involving M.I.T. may present additional opportunities to increase the supply of day care facilities. Concomitantly, various sectors of the Cambridge community are becoming active in searching for ways to increase the availability of day care services in Cambridge. This situation will undoubtedly offer new opportunities for the joint development of day care programs to employers, the city government, and the Cambridge neighborhoods.
INTRODUCTION

Need for Day Care

Out-of-home day care for the very young children of working parents, a well-accepted tradition in many parts of the world, was virtually unheard of in the United States before World War II when women were needed to meet war-time needs. During that emergency, day care centers were created to attract women with children into the labor force. At the end of the war, however, it was assumed that mothers would return to homemaking and child rearing.

Now, only 25 years since World War II, more than one-fourth of the mothers with children younger than six are part of the labor force. The need for adequate care for their children during working hours is one of their most pressing concerns. However, this does not begin to measure the need of mothers who want to work but are prevented from seeking a position because their child care problems are insoluble under present conditions.

The determination of actual need for day care services requires a situation not yet available anywhere in the United States -- unlimited high quality day care programs at fees each family can afford. If this situation existed, the actual need would be described by the number of children enrolled in day care centers. But because the supply and demand curves have heretofore been virtually inoperative, the apparent need has been almost solely identified in terms of the small children of female heads-of-household who must work, and hence must find child care arrangements.
Our society is becoming increasingly sensitive to the lack of options regarding child care. Before the convenience of electrical appliances and one-stop shopping centers, a woman as full-time manager of life in the home was an economic necessity. Now, women who are economically and socially disadvantaged, as well as those with advanced educational preparations, are questioning the necessity of their remaining at home full-time. Also, increasing costs in living necessitate that many women work for additional income to support families.

At the same time, early child development experts are discovering that a great potential of the "wonder years" (birth to 6 years) lies in the learning situation created by groups of similarly-aged children. Parents and experts alike are concluding that a mother can provide her children with all they need for healthy development without necessarily spending her entire day in their presence.

Therefore, the actual need for day care services will probably include a much wider group of people than previously thought. This increased demand will become manifest if more and more day care centers are opened and filled to capacity, and as waiting lists are absorbed.

For the last several years, members of the MIT community have discussed with the Planning staff alternative responses to the growing need for day care services which could:

--enable women with professional capabilities to make a greater contribution to their fields;
--provide student wives with children opportunities for employment at MIT;
--respond to the challenge of recruiting employees, particularly women, from disadvantaged areas of our community; and
--determine what role day care might have in reducing the high and increasingly expensive turnover in office personnel.
A survey that could produce some statistical measure of the actual desire and need for day care at MIT was clearly necessary.

The preparation of a survey designed to measure day care needs was difficult because the concept of full day out-of-home care for very young children is somewhat new in American culture. Many parents of small children have never given definitive thought as to whether they would enroll their children in a day care program if one existed.

By using a survey, at least potential need can be measured based on the ages of children and the receptivity of parents to out-of-home child care arrangements. The resulting data yields an upper boundary which may be far greater than the actual need, i.e. the number of parents who will actually take the final step of enrolling their children in the specific day care center available to them.

As a starting point in describing the need for day care services among the M.I.T. employee population, this report includes a description of the survey design, results of the survey, and an explanation of the limited, operational program of day care services entered into by M.I.T.
Section I of this report describes the methodology used in the survey design and provides an analysis of the data obtained from the questionnaire (see Appendix A) which was individually addressed to each M.I.T. employee on the hourly, bi-weekly and exempt payrolls as of April 1970.

Section II is a description of the implementation of a pilot program of daycare services through which the Institute and its employees share the costs of enrolling employees' children in the KLH Child Development Center. The original program proposal, containing the primary rationale and preliminary analysis, was produced by the M.I.T. Planning Office in February, 1970, and is titled, "Day Care Services for the M.I.T. Community".
SECTION I

SURVEY OF M.I.T. EMPLOYEE POPULATION

1.1 Survey Design

The questionnaire, after design and pre-testing in April of 1970, was sent through Institute mail to all 4650 non-staff, campus and Draper Laboratory employees, of whom 1634 completed and returned the survey. The 35% rate of response provided a more than adequate statistical base, and the simplicity of the questions promoted complete and direct answers which allowed a thorough data analysis.

Each of the three payrolls, hourly, bi-weekly and exempt, was designated by a different colored questionnaire, thus eliminating an extra question.

Information was requested from three principal groups of employees: all employees, whether or not they were married or had children; employees with children under age 5; and employees specifically interested in a day care program.

Question 1 (a) - (e), (See Appendix A) which called for demographic data from all employees, was used in part to test the randomness of the sample against known characteristics of the entire employee population: male/female ratio, full-time/part-time ratio, administrative/academic/Draper Lab ratio, and hourly/bi-weekly/exempt payroll ratios.

Questions 2 - 6 were directed only to employees with
children under age 5. These questions tried to measure part of the economic and psychological need described above. Their largest short-coming was their measuring perceived benefits of day care only as it freed parents to work, not for other reasons. This series of questions covered children cared for out-of-home by non-family members:

"3. (a) How many children under 5 years are now regularly cared for at home during the day by a member of your family?

(b) If your answer to (a) was "one" or more, which person takes care of the children? (circle one) Wife/Husband/Parent/In-law/Other member of family

(c) Would that person caring for the children be free to work if child care arrangements at reasonable cost were available for the children ages 2 1/2 to 5? No/ Yes: Part-time/ Yes: Full-time

(d) Would that person want to work? No/ Yes: Part-time/ Yes: Full-time

A negative response to "free to work"(3.c) was interpreted in any of the following ways:

1. Other children younger than 2 1/2 for whom care could not be arranged;

1. Kindergarten, which starts at age 5, will soon be mandatory for all Massachusetts children. However, very few kindergartens run full-day.
2. Older children who need care after school, thus precluding full-time employment;

3. A handicap or lack of work skill which prevents person from working;

4. Other demands on a person's time.

A negative response to the "want to work" question (3.d) was interpreted as one of the following:

1. No desire to work;

2. The respondent's perception of a spouse's desire to work which might not have been entirely accurate;

3. The respondent's own feeling about having his wife work.

In question 4, five categories of out-of-home child care were described.

"4. How many of your children under 5 years are regularly cared for during the day by: Neighbor/Babysitter/Nursery School/Day Care Center/Headstart."

Interestingly, the latter two forms of child care were not used by a single respondent.

The bottom perforated section of the questionnaire narrowed the respondents' particular interest in day care even further.
"If you are interested in being considered for a limited pilot program of day care services, please fill in your name and M.I.T. extension so you can be contacted, and then drop the entire questionnaire in any M.I.T. mail box.

Name: ___________ Extension: ___________

If you have no interest in participating in such a program, please tear along dotted line and drop completed top portion in any M.I.T. mail box."

The names compiled from this section provided the majority of participants in the pilot program (as well as the names of many women who interpreted "interest in being considered" to include consideration for teaching positions in the center).

The experimental question set off in a box "FOR ALL EMPLOYEES" tried to assess the word-of-mouth communication link that might exist between present employees and potential employees, primarily women not now working because satisfactory child care arrangements cannot be found.

"Do you know anyone with children who might be interested in working if group child care were available? If so, how many people in this situation do you know?"

The respondents fell into two groups. A few said they knew such people and seemed to know a large number in these circumstances. The majority of respondents, however, answered negatively, which was interpreted as:
1. They knew no one;

2. They felt presumptuous answering for someone else;

3. They had never really thought about it (except for the one respondent whose answer to "how many?" was, "all the working-age women in Eastern Massachusetts with children between the ages of 2 1/2 - 5").

A random follow-up of respondents whose names were known, who had answered this question affirmatively, indicated that the responses really did not represent many specific persons, but primarily vague calculations. Thus it appears that the word-of-mouth communication to non-working people cannot be quantified, and an attempt to do so has little validity. The "osmotic" effect of hearing about a day care program is effective, but cannot be measured.  

1.2 Survey Results

4650 questionnaires were sent out in April 1970 to all hourly, bi-weekly and exempt employees, of whom 1039 work in the Draper Labs. A total of 1634 were returned, or 35%.

Table I on the following page, which compares demographic information on the sample with similar percentages of the

2. Many respondents who were interested in the specific day care program were also subject to this "osmosis". Often it took several mths for the idea of day care to be appealing enough for them to take specific action.

**TABLE I**

**DEMOGRAPHIC INFORMATION**

<table>
<thead>
<tr>
<th></th>
<th>Survey Returns</th>
<th>M.I.T. Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Sex:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Employees</td>
<td>43.3%</td>
<td>Male 55%</td>
</tr>
<tr>
<td>Female Employees</td>
<td>55.9%</td>
<td>Female 45%</td>
</tr>
<tr>
<td><strong>2. Division of M.I.T.:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>39%</td>
<td>Academic 36%</td>
</tr>
<tr>
<td>Administrative</td>
<td>32%</td>
<td>Administrative 40%</td>
</tr>
<tr>
<td>Draper Lab</td>
<td>27%</td>
<td>Draper Lab 24%</td>
</tr>
<tr>
<td><strong>3. Office Hours:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>93%</td>
<td>Full-time</td>
</tr>
<tr>
<td>Part-time</td>
<td>05.6%</td>
<td>Part-time</td>
</tr>
<tr>
<td><strong>4. Payroll:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly</td>
<td>27%</td>
<td>Hourly 48%</td>
</tr>
<tr>
<td>Bi-weekly</td>
<td>59%</td>
<td>Bi-weekly 41%</td>
</tr>
<tr>
<td>Exempt</td>
<td>14%</td>
<td>Exempt 11%</td>
</tr>
</tbody>
</table>

4. Includes Division of Sponsored Research and related special academic laboratories e.g. Lab for Nuclear Science.

5. Complete data not available. Personnel Information and Records estimates survey ratio to be slightly high for part-time employees.
whole Institute population (N = 4650), gives indication of the representativeness of the sample in terms of the total number of Institute employees. The sample was, however, predictably weighted toward female employees who are more inclined to return a questionnaire which relates to their immediate or future interest in the availability of day care services. However, the disproportion in the male-female return rates was not nearly as great as expected, indicating both the general utility of this survey form and the interest of male employees in day care. Due to questionnaire limitations discussed previously, data contained in the present survey was not intended to be conclusive support for any recommendations contained in subsequent reports; but rather, to be treated as suggestive of the current and potential need for day care at the Institute.

In preparing and analyzing the questionnaire, we were primarily concerned with factors concerning (1) children and their age distribution (i.e. greatest potential number of enrollees in a day care program); (2) parents' receptivity to day care arrangements (and their willingness and ability to work if day care were available) as discussed above; and (3) the residential distribution of the employee population as elaborated in Table II, on the next page. This distribution can be used as one indication of the proportion of employees who presumably could make use of day care facilities without transportation difficulties.6

6. Of those people who were interested in participating in the 15-child pilot program, an unexpectedly large number were prevented from enrolling their children because of transportation modes judged by parents to be too difficult for their small children. (Car pool, complex public transportation route, lengthy daily car trip, etc).
<table>
<thead>
<tr>
<th></th>
<th>Boston</th>
<th>Brookline</th>
<th>Everett</th>
<th>Chelsea</th>
<th>Cambridge</th>
<th>Somerville</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5-10</td>
<td>10-15</td>
<td>15-20</td>
<td>20+</td>
<td>radius</td>
<td>radius</td>
</tr>
<tr>
<td>Raw Survey Data</td>
<td>345</td>
<td>316</td>
<td>96</td>
<td>535</td>
<td>156</td>
<td>56</td>
</tr>
<tr>
<td>Percentage of Sample</td>
<td>21.1%</td>
<td>19.3%</td>
<td>6%</td>
<td>32.7%</td>
<td>10%</td>
<td>4%</td>
</tr>
</tbody>
</table>
The residential statistics shown in Table II were of relatively small value as indicators of specific proportions of the population who should be included or excluded in day care program planning because travel time and mode were far more accurate indicators of employees' ability to use an institutional or industry-based day care center. Initially, we considered Boston, Cambridge and Somerville as within a feasible distance (within a 5 mile radius of M.I.T.) for commuting with small children by use of public or private transportation in all weather, and found that 46.3% of M.I.T.'s employees are within the area capable of being serviced by campus-based day care facilities.

Section II on the operational day care program will indicate that this five mile radius did not reflect the time-consuming, complicated public transportation routes servicing various parts of Roxbury and Dorchester; nor did it reflect the relatively easy commute enjoyed by some employees living more than 5 miles away.

Nonetheless, these data indirectly may begin to indicate the proportion of employees' families not affluent enough to make the outward move to the suburbs, who may have a more acute need for day care services due to the economic necessity of both partners working. Therefore we attempted to single out this group, isolating data for Cambridge and Somerville when appropriate.

However, one should note the low proportion of M.I.T. employees who reside in Somerville (6%) and in Cambridge (19.3%).
Family Size:

Based on the data in Table III, we can estimate that nearly two-thirds of the Institute's employees have no children; roughly 86% of the female employees and 41% of the male employees are childless. Ninety-three percent of the Cambridge residing employees were childless; and 71% of the employees who live in Somerville reported no children. This data suggests a disproportionately large student-related or transient population residing in Cambridge and Somerville -- a population composed largely of single or childless couples who are attracted to the area for convenient access to the universities and related activities.

There is another striking difference between the families of male employees and female employees. Female employees have smaller families than male employees. Of the employees who have children, 30% of the male employees have four or more children, while only 6% of the female employees have that many. The range of family size is much more evenly distributed among male employees than among female employees. Forty-four percent of female employees with children have only one child; 37% have two children; 13% have three. On the other hand, among male employees with children, 24% have one child, 29% have two; 21% have three.

Age Distribution:

Data in Table IV on page 16 apply to the 14% of the female employees who have children and the 59% of the male employees with children.

Table IV indicates significant differences between the ages
TABLE III
SIZE OF M.I.T. EMPLOYEES' FAMILIES

<table>
<thead>
<tr>
<th>Number of Children in Family</th>
<th>Female Employees</th>
<th>Male Employees</th>
<th>Total</th>
<th>Cambridge Only Total</th>
<th>Somerville Only Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 child</td>
<td>57</td>
<td>102</td>
<td>159</td>
<td>22</td>
<td>9</td>
</tr>
<tr>
<td>2 children</td>
<td>48</td>
<td>122</td>
<td>170</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>3 children</td>
<td>17</td>
<td>87</td>
<td>104</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>4 children</td>
<td>6</td>
<td>59</td>
<td>65</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5 children</td>
<td>2</td>
<td>24</td>
<td>26</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6 children</td>
<td>0</td>
<td>16</td>
<td>16</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>7 children</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8 children</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>9 or more</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>914</td>
<td>708</td>
<td>1622</td>
<td>316</td>
<td>96</td>
</tr>
</tbody>
</table>

7. Twelve respondents did not give their sex and are not included in data analyzed on the basis of sex, but are included in all other analyses.
### TABLE IV
AGE DISTRIBUTION OF ALL CHILDREN

<table>
<thead>
<tr>
<th>Age of Each Child</th>
<th>Children of Female Employees</th>
<th>Children of Male Employees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 9 years</td>
<td>55</td>
<td>443</td>
<td>498</td>
</tr>
<tr>
<td>10 - 19</td>
<td>79</td>
<td>436</td>
<td>515</td>
</tr>
<tr>
<td>20 - 29</td>
<td>87</td>
<td>191</td>
<td>278</td>
</tr>
<tr>
<td>30 - 39</td>
<td>13</td>
<td>35</td>
<td>48</td>
</tr>
<tr>
<td>Over 40</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>236</strong></td>
<td><strong>1112</strong></td>
<td><strong>1348</strong></td>
</tr>
</tbody>
</table>
of male employees' children and female employees' children. In this table the relevant distinction is not in the total numbers of children in each age group, but in the distribution among the male employees' children and the female employees' children. Nearly 79% of male employees' children are still dependent, i.e. under 20 years old, contrasted with only 56% of female employees' children. Breaking down this age group to small children (under 10) we see that 40% of male employees' children are very young, while only 23% of female employees' children are this young. Furthermore, a substantially larger portion (37%) of female employees' children are young adults (20-29), while only 17% of male employees' children fall in this age group.

Thus, the great majority (79%) of the Institute's male employees' children are between the ages of 0-19, indicating a significant proportion of younger men in the family formation stages among the employee population. The great majority of female employees' children (70%), however, are between the ages of 10-29, suggesting a high proportion of older female employees who return to work as their children grow up and leave home.

In summary, then, the female employees with children have proportionately far fewer younger children than do male employees. Additionally, female employees also tend to have significantly less numbers of children in their families. Among the M.I.T. employee population, however, women with young children are rare. Many women would prefer to stay home and raise their young children. However, there are women who must work, or who wish to work, who would seek employment at the Institute if they knew a day care program were available. Recruitment from this sector of
the potential work force would begin to balance the proportions of male and female employees from all stages of family formation, as well as add to the employee population a sector potentially less susceptible to the high turnover rates associated with highly mobile student wives or single women.

From the data in Table V, we again see the two prominent trends among employees: male employees have more and younger children than female employees; and, there are proportionately far fewer employees with families living nearby in Cambridge and Somerville. Using the data further, we find that 70% of both male and female employees' children under age six are of day care age (2 1/2 - 5 under existing legislation).

Among female employees with children 0-9 years old, it might be expected that a large majority of these children would be 6 years or over and already cared for in school for the preponderance of the day. However, 55% of the M.I.T. female employees with children in this age group have preschool age children, for whom they have had to make day care arrangements. (The equivalent proportion among male employees with children 0-9 years was 53% under age 6).

Projecting the number of day care age children (2 1/2 to 5) from our sample of 1634 to the total population of 4650, we estimate that there may be present 512 children of M.I.T. employees eligible for day care. But this figure above reflects neither the parents' desire for day care nor their desire for employment if day care were available.
TABLE V

AGE DISTRIBUTION OF CHILDREN UNDER SIX

<table>
<thead>
<tr>
<th>Age of Each Child</th>
<th>Children of Female Employees</th>
<th>Children of Male Employees</th>
<th>Total</th>
<th>Cambridge Only</th>
<th>Somerville Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 6 months</td>
<td>0</td>
<td>20</td>
<td>20</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6 months - 1 year</td>
<td>6</td>
<td>31</td>
<td>37</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>2 years</td>
<td>7</td>
<td>41</td>
<td>48</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>3 years</td>
<td>6</td>
<td>45</td>
<td>51</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4 years</td>
<td>8</td>
<td>50</td>
<td>58</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5 years</td>
<td>3</td>
<td>47</td>
<td>50</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Out-of-Home Child Care:

Since these estimated 512 children belong to parents currently in the labor force, some provisions have had to be made for child care. Either one parent stays home to take care of the children or some other arrangements are found. Expecting that the bulk of children would be cared for by their mothers, we were more interested in the frequency with which other arrangements existed. Table VI on page 21 presents our findings.

Of 144 employees who have children presently cared for in the home, 8, 12 wives cared for the children, as did 3 husbands, 11 grandparents, and 7 relatives. At least 3 couples split child care duties while both worked.

To become relevant to the need for day care facilities, these figures must be qualified by data indicating parents' willingness and freedom to work if day care were available. Assuming day care facilities could be arranged for all these children, 57 individuals said the person caring for their children would still not be free to work (for a variety of reasons), 56 said that this person would be free to work part-time, and 22 people would be free for full-time employment. Of those now caring for children whom day care would free to work part-time or full-time, 71 or 91% would like to work.

From those who have been able to arrange other means of child care (babysitter, nursery school and neighbor) a partial idea of the effects of day care centers can be gathered. Of 47 responding to the question, "Do these arrangements enable you or someone else in your family to work who would otherwise have to stay home with children?" 16 replied NO; 14, YES: PART-TIME; and 17, YES: FULL-TIME.

8 Multiple arrangements bring the total reported to more than 144 adults.
### TABLE VI
**CARE OF CHILDREN UNDER AGE SIX**

<table>
<thead>
<tr>
<th></th>
<th>Female Employees</th>
<th>Male Employees</th>
<th>Total</th>
<th>Cambridge Only</th>
<th>Somerville Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>At home</td>
<td>6</td>
<td>138</td>
<td>144</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>By neighbor</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>By babysitter</td>
<td>18</td>
<td>8</td>
<td>26</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>In nursery school</td>
<td>3</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>In Day Care Center</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
It should be noted that in the latter category, all 17 respondents were women employees. Indeed, 91.3% of the 23 women (or 21 women) who reported outside-the-home child care (Table VI) also mentioned that such arrangements allowed someone (themselves or their spouses) to hold full time or part-time employment. While it is tenuous at best to speculate about motivation from these figures, it seems likely women are the ones presently most in need of day care facilities.

Projected Need for Day Care Services:

To estimate the extent of need at M.I.T. for day care services, we can extrapolate the number of women employees who currently use some form of child care which allows them to work (21) to the scale of the full 4650 Institute employees, and can suggest that around 59 female employees fall into this group.9

Adding the male employees who reported that present child care arrangements allowed someone to work, we project a total group of 89. This group of employees requires some form of child care merely to allow present employment to continue. We may speculate further that at present a high rate of turnover among employees in this group could be anticipated, in large part due to the lack of consistent, dependable child care arrangements. In addition, the children of this group of employees are not getting the full benefits of a quality day care program, and their care may in fact be inadequate for their healthy early development.

9 One problem with this calculation is that those who have some child care arrangements, or require some, may be more likely to return a questionnaire on day care than those who have no children. Thus, the calculation would be weighted towards women with children.
Combining figures for those now enabled to work by child care arrangements (89), and those who would be free to work and would want to work if day care were readily available (202), we come out with a total projected for the total M.I.T. employee group of 291.

Thus, if we are dealing with a representative sample, 291 people would be able to seek or to continue to hold full-time or part-time employment if day care facilities were available. At this point, we must be cautious about our sample for reasons cited above. We are not suggesting that at present the Institute should initiate a day care center for the children of approximately 300 employees; but rather are estimating the potential maximum need. We can say that over 100 respondents replied to our questions in such a way that implied they could use a day care program. Over fifty employees expressed enough interest in a proposed pilot program of day care services by returning their names and office extensions with the questionnaire for consideration in the cost-sharing program at the nearby KLH Child Development Center.

Finally, we should again stress that the above figures are based on the current M.I.T. employee group. They do not indicate the need for day care among potential employees in the Cambridge and Boston communities as a whole. Nor do they allow for possible changes in the composition of the group of M.I.T. employees in the future. It is possible that if it were well known in the metropolitan area that day care facilities were available through employment at M.I.T. a shift might occur in the employee composition, increasing the proportion of young mothers and disadvantaged persons in the Institute community. Coming from established
homes in the Boston area, they may prove to be a more stable employee group than the group of single people (primarily female) who may regard their employment at the Institute as "temporary" until a more attractive opportunity becomes available (marriage, further schooling, higher paying job, etc.). In addition, women who leave M.I.T. to have children would be encouraged to return to the Institute when their children reached day care age if they knew day care facilities were available before they left.

1.3 Conclusions

In summary, we can conclude that there is a sector of the present M.I.T. employee population who could use a program of day care services for their children in the appropriate age bracket. The upper limits of this group may be near 300 employees who have about 500 children. We can not estimate from these figures how many would use such a program. We can only suggest a lower limit for employees who would use an industry-based day care center. This lower limit represents the 15 children actually enrolled in the Institute's pilot program at the nearby KLH Child Development Center. It does not represent the number of employees who were too young, or those who were keenly interested but needed more time to work out transportation, financial, and separation difficulties.

Finally, this analysis assesses the need of only the non-staff employee population which constitutes about 31% of the entire Institute community.
SECTION II

PILOT PROGRAM OF DAY CARE SERVICES FOR M.I.T. EMPLOYEES

2.1 Introduction

The following analysis of the Institute's pilot program of day care services for children of M.I.T. employees describes the policy-formation and implementation period, and the first three months of the program's operation.

The program was originally conceived as the result of several months of background research on day care, stimulated from different sources. One was the interest in day care within some groups of the Institute community, primarily the Technology Matrons, and Planning and Personnel Office staffs. Discussions and individuals' activities in the day care field had gathered momentum over the last several years and needed to be consolidated and "harnessed".

Another source was, directly and indirectly, the women employees. The direct influence came from a growing awareness by female employees of the role day care could play in expanding their employment opportunities. The indirect, and undoubtedly more pressing influence, was the pattern of female employment at the Institute which is characterized by an extraordinarily high turnover rate and a record which reflected difficulty in recruiting and retaining minority and disadvantaged women.
The M.I.T. program as it was specifically proposed was the result of informal inquiries by the KLH Child Development Center into M.I.T.'s interest in participating in its community-based, prototype day care center.

2.2 Background

The KLH Child Development Center was conceived of several years ago by the executives of this high quality stereo component production industry as a way to research the advantages and disadvantages of an industry-related day care center from the standpoint of the parents, the children, the firm, the community, and the local and national economy. The Children's Bureau in the Department of Health, Education and Welfare awarded a grant to the Center for the major part of the operation and research costs from July, 1967 to June 30, 1970.

As the KLH Child Development Center's three-year demonstration grant from HEW was scheduled to expire in June 1970, the Board of the Center realized that severe financial and philosophical hardships were ahead. Philosophically, the Center would be forced to abandon its commitment to serving many industrial-based working parents because the lack of a Federal subsidy would put fees beyond their economic means. Financially, the Center would have had difficulty finding enough parents who could support the cost per child, an estimated $40 per week.

Therefore, the Board agreed that contractual relationships

with large employers and with the Welfare Department should be investigated, as well as relationships with individual parents.2 "Places" were offered to the Polaroid Corporation, Massachusetts General Hospital, the Welfare Department, Harvard University, M.I.T. and others. The Welfare Department committed itself to payment for 20 places (later increased to 30). The Polaroid Corporation contributed $10,000 to the Cambridge Day Care Association to assist it in coordinating day care planning activities in the City. And the Institute committed itself to the support of 15 children in the Center.3

2.3 Contracting for Day Care Services

The considerations influencing the decision to contract for day care services should be divided into two categories: considerations for initiating any program of day care services, and considerations for specifically contracting for services with the KLH Child Development Center.

The former set of considerations revolved around benefits derived from day care by children and their working parents, and also by employers who make day care services available. Many groups -- public and private -- are experimenting with day care services as one solution to the economic and social problems their constituencies face. Availability of these services is eventually expected to become an integral part of both the personnel management picture, in terms of

2. The decision reflects the strongly held opinion of the Director, Mrs. Kate Lafayette, and other experts in the day care field, that a tri-partite relationship among government, industry and individuals is the most appropriate direction for the future of day care in the U.S.

recruiting women to fill new manpower demands, and the child welfare picture in terms of reducing future social problems.

It has become evident that the availability of day care is intimately related to employment of the disadvantaged. Manpower training programs for disadvantaged people, especially women, are generally useless unless centers exist for pre-school child care during working hours. Conversely, availability of adequate day care services is also seen as a critical element in the war to break the poverty cycle. By offering parents on-the-job training opportunities and at the same time making good care available for their children, hope for self-sufficiency can be held out to a sector of the potential labor force.

But a program of day care services was of interest to the Institute not only for its usefulness in recruiting and retaining disadvantaged employees. It also was argued that because mothers were presently working at M.I.T. whose continued employment was contingent on their ability to arrange care for their small children, a program of day care would eliminate one factor which contributes to a very high employee turnover rate.

Therefore, to augment the Institute's efforts to recruit and retain disadvantaged people, and to provide an additional benefit for present employees to remain at M.I.T., the Institute became interested in initiating an experimental day care program. In this way, parent, child and employer would benefit.

The KLH Child Development Center offered the Institute a timely opportunity to become involved in an existing high
quality day care operation which had a documented two year history and was located virtually next-door to the campus. The opportunity was regarded as an experiment of one year's duration, and as such, was of appropriate experimental size in terms of numbers of children, amount of capital outlay, and amount of Institute staff effort.

It was expected that from such an experience, the Institute would get a clearer picture of the advantages and problems relating to industry-based day care programs. It was also hoped that the implications for the Institute's future involvement in supporting day care services would become clearer and more directed.

2.4 Method of Implementation

The pilot program runs on a cost sharing basis involving M.I.T. and its employees who wish to enroll their children in the nearby KLH Child Development Center at fees based on individual family incomes, instead of the KLH rate of $37.50 per week per child. The difference between what the employee can reasonably afford (based on a sliding fee scale to be described later) and the day care center's cost-per-child is paid by M.I.T.

The day care center is guaranteed a certain amount of planning security and budgetary flexibility by the contractual agreement in which the Institute accepts the responsibility for full payment for a specified number of places on an annual basis, whether or not the full

4. "Employees" are considered those persons on hourly, bi-weekly, and exempt payrolls (Campus and Draper Labs). This designation includes staff, students and faculty.
quota of children is actually enrolled at all times.

To insure that all sectors of the Institute Community interested in a day care program were represented in the policy decisions, an Advisory Committee of 14 people was formed. A Working Subcommitte was selected from this committee which handled the actual program implementation. Serving on the Committee were representatives from the Offices of the Chairman, President and Provost, from the Planning Office, Opportunity Development Office, the social worker from the Medical Department, representatives from the Personnel Office, Mrs. Laya Wiesner and Mrs. Elizabeth Johnson.

The policy followed in filling the 15 places, and in refilling any vacated places is described below. The working subcommittee identified what it considered to be the issue areas, discussed alternative policies to be followed, and submitted its recommendations to the larger Advisory Committee for approval. Once policy "directives" were clear, the Personnel Office staff undertook the interviewing of employees interested in the day care program. The initial list of interested employees was compiled from responses to the recently administered survey of employees (see Section I). A follow-up article in the Institute's community newsletter did not significantly add to the list of 23 employees with day-care aged children who were interested in the pilot program.

5. An article describing the nearly fully enrolled program in July's Tech Talk surprisingly generated only minimal new inquiries from employees. This is partially explained by the article's mid-summer publication when older children are out of school and when families take extended vacations. As Fall approached, the rate of inquiry rose sharply. It did however, generate a great deal of interest among younger faculty, staff and student...
performed a coordinating and overseeing function for the administration of the first few months of the pilot program. As this program becomes operational, the administrative aspects of the program will be transferred to the Personnel Office.

Enrollment Policies:

The Committee felt an obligation to try, at first, to serve the existing need within the Institute. Because of the limited size of the program, participation was limited to Institute employees on the hourly, bi-weekly or exempt payrolls. The underlying assumption was that these families would tend to be less affluent, and day care might represent a solution to economic problems by reducing present child care costs, or by freeing a spouse to earn an income.

Although the Committee initially wished to give priority to employees with only one eligible child, in order to serve more employees, this objective was soon abandoned because of the large number of employees who needed day care for two children. Although the age eligibility ranges from 2 1/2 through kindergarten, the possibility of having two children of eligible age is high.

Another priority characteristic which soon proved unrealistic was the attempt to select older children, i.e. children over 3 1/2, who would matriculate to kindergarten the next year and therefore not be adversely affected if the program could not be renewed for the succeeding year. However, many of the employees who really wanted day care services had children of the minimum age, so this age limitation was quickly abandoned.
In addition to giving priority to present employees, the Committee also specified that employees who were residents of Cambridge would be given special preference, as yet another way of expressing the Institute's sense of special obligation to the citizens of the Cambridge community.

In the event that all 15 places could not be filled from among present employees, the unfilled places were to be offered to job applicants who could not work without child care arrangements. Again, a priority was to be given to Cambridge citizens.

All employees who had indicated an interest in day care programs in their returned survey forms were contacted. Those employees whose children were too young or too old, or those who were just curious about the subject of day care, were sent a letter describing the proposed program and the reasons why they specifically could not be served by it. (Appendix B). All employees with children of day care age were personally contacted. The KLH program and M.I.T.'s involvement were described, and particular interests or needs were discussed. For those employees who maintained interest, arrangements were made with the staff of the day care center for the parents and their children to familiarize themselves with the Center.

As soon as the parents and Center staff felt that they and the children were satisfied with the arrangements, the children were enrolled and payroll deductions for fees were started. In the majority of cases the "adjustment period" was almost instantaneous.

Fee Guidelines:

The following sliding scale fee guidelines were used by
the Committee:

<table>
<thead>
<tr>
<th>Total Family Weekly Income</th>
<th>Approximate Fee (% of Salary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 75 - $ 90</td>
<td>$ 5/week (6%)</td>
</tr>
<tr>
<td>$ 91 - $ 95</td>
<td>$ 7.50/week (8%)</td>
</tr>
<tr>
<td>$ 96 - $100</td>
<td>$ 9/week (9%)</td>
</tr>
<tr>
<td>$101 - $110</td>
<td>$12/week (9%)</td>
</tr>
<tr>
<td>$111 - up</td>
<td>$15/week or 13% of salary</td>
</tr>
</tbody>
</table>

Adjustments in calculating family income were liberally made in cases where families had large, continuing expenses such as child support, alimony, hospital bills, etc. Additionally, in cases where families had only recently begun earning a liveable income, the fee was based on an amount which seemed "reasonable" to the employee and Personnel staff. The weekly fee was again reduced by approximately $5.00 for each other child not of day care age. The fee for the second child needing day care was about half the fee of the first.

Fees paid for day care services by employees averaged $12 weekly, but ranged from $5 weekly per child to $20.00. The maximum total amount paid by any employee was $22, and the minimum was $10. Both of these extremes represent total payments for two children.

For nine of the 12 employees, the M.I.T. salary was practically the family's sole source of income. The

6. Understanding the experience of poverty and welfare where bills accumulate, and necessary medical treatments or household purchases are postponed, we thought it unfair to ask such families to give up their new margin of economic flexibility to pay the scheduled rate for day care.
average salary of participating M.I.T. employees was $138 weekly gross. Salaries paid to M.I.T. employees ranged from $92 to $175 per week.

2.5 Profile of Participant Employees

This description pertains to only those employees whose children occupied the original 15 places in the pilot program.

The survey of the 4700 employees yielded the names of nearly 50 employees with pre-school age children, 23 of whom had at least one child of day care age and were personally interested for their child.

Sixteen employees did not or could not participate in the program for a variety of reasons which were:

1. Too long a day for the children;

2. Too expensive - could not justify cost to themselves;

3. Had summer plans - would reconsider in the Fall;

4. Difficulties separating mother and child;

5. Transportation problems (needed second car; had no decent public transportation route; often worked overtime; went to school at night directly from work; etc.);

6. Unsatisfied with the KLH Child Development Center specifically;

7. Could not make the decision to enroll children, or had made other child care arrangements.
Of these 16 employees, only four visited the day care center. Two women employees were not satisfied with the Center; two non-working mothers felt their children "were not ready" to leave them.

The remainder of the 23 who were personally interviewed enrolled their 9 children. The other 5 employees now participating (with six children) heard of the program by word-of-mouth. These twelve employees enrolled 6 boys and 9 girls. Ten children were four or more; the remaining five were from 2 1/2 to 3 1/2 years old.

Three of the employees are female heads-of-household. In all the two-parent families, either both parents worked or one worked and the other was a full-time student, with the exception of one mother who is confined to a wheelchair. Three of the wives in these families were enabled to work because of the day care program. (One came to work at M.I.T.). Although employees were usually motivated by a combination of factors, we have tried to group the primary reason which motivated each employee to participate in the program:

Primary Motivating Factor for Employee's Participation:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. More dependable than present</td>
<td>3</td>
</tr>
<tr>
<td>out-of-home child care arrangements</td>
<td></td>
</tr>
<tr>
<td>2. Benefit to child</td>
<td>4</td>
</tr>
<tr>
<td>3. Less expensive than present</td>
<td>2</td>
</tr>
<tr>
<td>child care arrangements</td>
<td></td>
</tr>
</tbody>
</table>
4. Enables spouse to earn supplementary income or arrange a more satisfactory working schedule

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enables spouse to earn supplementary income or arrange a more satisfactory working schedule</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL EMPLOYEES PARTICIPATING 12

Geographical Distribution of Participating Employees:

All but one employee come from the immediate area, i.e. within a five-mile radius of the Institute.

<table>
<thead>
<tr>
<th>City of Residence</th>
<th>Number of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge</td>
<td>3</td>
</tr>
<tr>
<td>Somerville</td>
<td>1</td>
</tr>
<tr>
<td>Dorchester</td>
<td>3</td>
</tr>
<tr>
<td>Roxbury</td>
<td>1</td>
</tr>
<tr>
<td>Revere</td>
<td>1</td>
</tr>
<tr>
<td>East Boston</td>
<td>1</td>
</tr>
<tr>
<td>Jamaica Plain</td>
<td>1</td>
</tr>
<tr>
<td>Malden</td>
<td>1</td>
</tr>
</tbody>
</table>

2.6 Conclusions

There is little doubt among the participating employees (and the Institute staff involved) that this day care program is benefiting the children in new ways that home care or babysitting cannot. Employees continually report impressive developments in their children which they attribute to the day care program. Word of their satisfaction is creating a slowly, but constantly, growing
demand for this service. A waiting list has already been compiled at this time. This satisfaction is also a strong indication that such day care programs may serve as an incentive to remain employed by the institution that provides day care as an employee fringe benefit.

Enrollment:

In the two-month implementation period, the number of parents wishing to enroll their children in day care was small. In fact, it was only by the start of the contractual year (July 6, 1970), that we were able to fill the program, despite a recent Institute-wide notification that a few spaces were still available.

Since that time (especially as Fall neared, and as the number of job applicants rose) a waiting list of 35 employees has accumulated. Seven of these employees have a pressing need for this day care service. An additional 25 students, staff, and faculty members have asked to be informed of any further day care programs in which they could be included. This experience corroborates that of other day care programs that we have investigated: a start-up period of several months to one year should be planned before the full demand for day care can be felt, especially among employees, who may have had the least exposure to the concept of day care.

While the preceding preliminary conclusions deal with day care programs generally, there are several observations on cost-sharing and contracting which can be made about this specific program.
Fees:

The predominant institutional commitment in this sort of program is the fee-subsidy. For 15 children in the program, the total annual costs were about $28,000, of which employees paid roughly one-third. Given the variety of financial situations experienced by employees, and the wage range which is assumed of this group ($4,600 to $9,999), the average fee paid by employees cannot be higher.

Contract:

Administratively, this contractual arrangement has required less commitment of staff resources than any other type of program. The contractual arrangement has other advantages. It places the day care center in a "buffer" position, removing the Institute from the employees' domestic situations. Conversely, the Institute becomes a buffer between the parents and the Center in matters of fee collection. By using standard payroll deductions for the employees' portion, and large, infrequent total payments to the center for the "M.I.T. children", the financial aspects are facilitated for all three parties.

The contractual arrangement specifically with the KLH Child Development Center has several implications. Because the Center is of high quality, the Institute can

7. It appears that the primary staff functions are interviewing interested employees, making payroll deductions, acting as liaison with the Center, and serving as an information center on child care.

8. The Institute's portion of the Center's revenues is paid well in advance of services rendered to give the Center a much-needed cash flow which is not possible through weekly payments by private individuals.
comfortably assure employees of the program's excellence. Additionally, because the KLH Center is nationally known, the Institute's role in the financial operation of the Center is becoming a widely known example of an educational institution's involvement in the day care field.

From the Center's perspective, the contractual relationship with M.I.T. allows it to again achieve its original objective of serving working parents. The "M.I.T. children" add a highly desirable socio-economic component to the Center's children population. Without them, the children would be from affluent families or welfare homes. Actually, the 15 M.I.T. children themselves constitute a racially and socially diverse group within the same economic stratum.

Program Cost:

The Institute's $20,000 commitment to the $28,000 one-year pilot program for 15 children was well spent. A figure of $2000 is used by the Department of Health, Education and Welfare as the average annual per-child cost of comprehensive day care. This figure has been derived from the cumulative experience of many of the non-profit comprehensive day care programs9 in the U.S., and is calculated by dividing each day care center's total cost of operation by the number of children enrolled. As more day care programs are initiated, this cost is becoming a standard planning datum. Thus we conclude that

9. A comprehensive day care program typically operates for a minimum of six hours a day, five days a week, and includes medical, nutritional, counselling, educational and recreational components. This definition distinguishes "comprehensive day care" from simple custodial care which is essentially a group babysitting service. See Featherstone, Joseph, "The Day Care Problem, Kentucky Fried Children", The New Republic (Washington, D.C.: Vol. 163, No. 10-11; September 5 and 12.)
the Institute probably could not have undertaken an experiment to provide this service for this sector of the Institute community for less.

The pilot program extended the use of existing facilities to a sector of the population which could not otherwise have afforded them and which might not otherwise have ever had an incentive to change its child care patterns. It also assured the continuation of this facility.

From the several months of operational experience with this program, it has become evident that it is in M.I.T.'s interest to retain at least some part of this day care program. There has already been a definite public relations advantage. Although this program does not achieve the maximum public attention that a new Institute-initiated center would, it does serve to effectively answer the question of "what is M.I.T. doing about day care"? This is a question which is asked with increasing frequency by M.I.T.-related people and people of other universities.

Additionally, the program has been of benefit to the functioning of other programs at the Institute. The social work representatives of the Medical and Personnel Offices have found relief for some severe domestic hardships of employees through the day care program. The disadvantaged and minority employee recruitment operation is facilitated in several instances by the availability of day care positions. Finally, although peculiar individual circumstances prevented any of the present male MA-5 trainees from participating, availability of day care services will be essential in the implementation of the proposed MA-5 training program for female office personnel.
2.7 Recommendations

1. The Institute should continue its commitment to providing day care services for its community as a program which is rapidly becoming an integral part of other on-going employment and personnel operations at the Institute.

2. For the near future, the contractual relationship with the KLH Child Development Center is the most expedient and practical way of implementing this commitment. There are three alternatives that this contractual relationship can take after completion of the pilot year on July 2, 1971.

A) Minimal Scope of Contract

Continuation of the cost-sharing arrangements with presently participating employees for as long as they want their children enrolled is considered the minimal acceptable level of involvement. In this way, the Institute can draw some conclusions about the benefits of day care for this particular sample group. To terminate the pilot program entirely (despite the fact that all employees know it was set up for only one year) is unfair to the children who unanimously love "school", and may in fact, precipitate employee termination in this group.

If all the participating employees enroll their children through kindergarten, the pattern of the Institute's financial commitment is suggested in the following manner:
Years of Operation of Day Care Program

<table>
<thead>
<tr>
<th>Years</th>
<th>Number of Children</th>
<th>Projected Cost to M.I.T. (Based on Present Individual Fee-Sharing Rates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 1970 -</td>
<td>15</td>
<td>$19,777</td>
</tr>
<tr>
<td>July 1971</td>
<td>10</td>
<td>$12,600</td>
</tr>
<tr>
<td>(Pilot Year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 1971</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Second Year)</td>
<td>5</td>
<td>$5,525</td>
</tr>
<tr>
<td>July 1972</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Third Year)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B) Maintenance of Present Contract

The program's results have already indicated that this has been a very positive use of a portion of the Mellon Foundation grant. Therefore, if these funds are available at the same level, it would be highly desirable to continue the subsidy of 15 places at a rate of 2/3 total program costs.

As vacancies occur several alternative policies can be considered for filling the places:

* Age eligibility for entering first grade varies from town to town. For statistical purposes, we have used the following outline:

<table>
<thead>
<tr>
<th>Child Born Before</th>
<th>Enters First Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/65</td>
<td>Fall 1971</td>
</tr>
<tr>
<td>12/66</td>
<td>Fall 1972</td>
</tr>
<tr>
<td>12/67</td>
<td>Fall 1973</td>
</tr>
</tbody>
</table>
2. Expand participation to include students' and research assistants' children. This would still require cost-sharing of fees at an average rate of 2/3 Institute, 1/3 parent.

3. Expand the program to the entire M.I.T. Community, i.e. extend service to faculty and staff, as well as students. This group can be expected to reverse the cost-sharing ratio and support 2/3 of fees.

C) Optimal Scope of Contract

The success of the pilot program justifies a continuing commitment of Institute funds to support M.I.T.-related children in the KLH Child Development Center. The level of this participation should be increased to 20 or 25, and should be opened to the entire Institute community. An expansion to 25 places would require an additional institutional commitment of $6000 - $9000 per year, depending upon the percentage of staff and faculty children accepted vis à vis employee and student children.

3. The Institute is extending an existing service through this program. It is not, however, supplying badly needed new facilities. Supplying this service through contractual arrangements should be considered as an important component of a larger, diverse set of childcare opportunities\textsuperscript{10}. To increase the variety of

\textsuperscript{10} These opportunities have been further expanded by the Technology Nursery School's expansion into an afternoon program. The combination of the Nursery School's program and the KLH program theoretically offers full-day care to 40 M.I.T.-related children.
opportunities, M.I.T. should consider the inclusion of space for new day care programs in all future residential construction in which M.I.T. is involved. At this time there are three excellent possibilities where day care facilities should be contemplated: housing for low-income families on Erie Street, the development site on Portland Street and the future development of the Simplex properties. Preliminary investigations have already been undertaken to include a day care facility in the completion of Technology Square. This opportunity for involving many employers in the development of an industry-based day care center should not be missed. Nor should the opportunity be overlooked for providing a facility so close to the Washington Elms - Newtowne court public housing project, which greatly needs such facilities.

4. The Institute should encourage and assist, wherever possible, the efforts of Cambridge citizens to start new day care programs. This assistance could take the form of small monetary grants, staff assistance, contractual relationships, or facility procurement and renovation, depending on the situation and degree of involvement of various sectors of the Cambridge community. Programs initiated and used jointly with neighborhoods, businesses and the City stand the largest chance of long-term success.

5. The Institute should take every opportunity to describe

11. 24-hour day care facilities are already being planned as part of two industrial parks in Brooklyn, New York under the auspices of New York's Human Resources Administration. "New York Times", September 12, 1970, pg. 1.
its program of day care services to other universities and large employers. The Institute's demonstration program will encourage other employers to get involved in the day care field. It will also serve as an effective illustration of institution interest to policy makers at all levels of government.

By sharing the financial aspects of providing day care services, parents, industry and government will also share the benefits. In addition, this fiscal partnership will expand the availability of day care services, and such expansion will increase options for parents and educators regarding locations and types of day care facilities and educational philosophies followed.

Hopefully, these recommendations will lead to the beginnings of what we all seek: high quality day care at prices everyone can afford.
APPENDIX A

The Institute would like to have current information about its employees and their needs in part to determine the need for day care for children and other related services. Please help us by answering the questions below. Whether or not you are married or have children. If all employees return their questionnaires, we will be able to better anticipate and meet some of the needs of the M.I.T. Community.

1. (a) Town of Residence ( & zip code)
__________________________
(b) Office or Department
__________________________
(c) Job Status (circle one)
(i) FULL-TIME  (ii) PART-TIME

(d) Sex (circle one)
(i) MALE  (ii) FEMALE
(e) IF MARRIED, is your spouse an M.I.T. Student? (circle one)
(i) NO  (ii) YES: SPECIAL  (iii) YES: FULL-TIME

2. If you have children, please give the age of each: __________ __________ __________ __________
(These following questions apply only to people with one or more children under the age of 5, EXCEPT QUESTION #7 WHICH IS FOR ALL EMPLOYEES)

3. (a) How many children under 5 years are now regularly cared for at home during the day by a member of your family?
(b) IF YOUR ANSWER TO (a) WAS "ONE" OR MORE, which person takes care of the children? (circle one)
(i) WIFE  (ii) HUSBAND  (iii) PARENT
(iv) LAW  (v) OTHER MEMBER OF FAMILY
(c) Would that person caring for the children be free to work if child care arrangements at reasonable cost were available for the children ages 2-1/2 to 5? (circle one)
(i) NO  (ii) YES: PART-TIME  (iii) YES: FULL-TIME
(d) Would that person want to work? (circle one)
(i) NO  (ii) YES: PART-TIME  (iii) YES: FULL-TIME

4. How many of your children under 5 years are regularly cared for during the day by
(i) a neighbor_______ (ii) a babysitter_______ (iii) a nursery school_______
(iv) a day care center_______ (v) Headstart_______

5. IF ANY PART OF #4 APPLIED TO YOUR CHILDREN, does that child care presently enable you or someone else in your family to work who otherwise would have to stay home with the children? (circle one)
(i) NO  (ii) YES: PART-TIME  (iii) YES: FULL-TIME

6. How much would you be willing to pay (between $5 and $40) per child for group child care during working hours, 40 hours per week, 50 weeks per year, for children ages 2-1/2 to 5 (excluding transportation)?

$__________ per week

7. FOR ALL EMPLOYEES
(a) Do you know anyone with children who might be interested in working if group child care were available? (circle one)
(i) NO  (ii) POSSIBLY  (iii) YES
(b) IF YOUR ANSWER TO (a) WAS "POSSIBLY" OR "YES", how many people in this situation do you know?
What is the total number of their children who would need day care? _________
If you are interested in being considered for a limited pilot program of day care services, please fill in your name and M.I.T. extension so you can be contacted, and then drop the entire questionnaire in any M.I.T. mailbox.

Name: ____________________________ Extension ______

IF YOU HAVE NO INTEREST IN PARTICIPATING IN SUCH A PROGRAM,
PLEASE TEAR ALONG DOTTED LINE AND DROP COMPLETED TOP PORTION
IN ANY M I T. MAILBOX.

THANK YOU VERY MUCH FOR YOUR COOPERATION.

THE PLANNING OFFICE

1Originally this survey was printed on one long sheet of card stock folded in fourths and sent without an envelope with the employee's name and address pasted to the front.
Appendix B

SUGGESTED LETTER FOR INELIGIBLE RESPONDENTS:

Dear __________:

Thank you for taking the time to complete and return your recent questionnaire on which you indicated your interest in a limited pilot program of day care services.

Through this pilot program, ten children of M.I.T. employees will be enrolled for one year in the nearby KLII Child Development Center, a day care center of excellent quality and reputation, located near the Institute at 38 Landsdowne Street. The agreement between M.I.T. and the Child Development Center provides for payment of almost $40 per week for each of ten M.I.T. employees' children (or nearly $20,000 for the one year experimental involvement!)

The Institute recognizes that this is too high a cost to expect every employee-parent to pay. Thus a sliding fee scale based on family income will determine what portion of the total cost should be paid by the employee-parent. The Institute will make up the difference for the duration of this one-year period.

Obviously it will be hard to narrow the choice to only ten children. However, based on the responses to the questionnaire, an Institute-wide committee is working to select fairly those employee-parents who would most benefit from such a program.

INSERT a., b., c., or d. However, we will try to keep the entire Institute community aware of the progress of this pilot program, as well as the future prospects for other (less costly!) forms of day care services for M.I.T. children.

Thank you again for your cooperation and interest. If you have further questions, please do not hesitate to write or call.
(NO CHILDREN)

a. You indicated that you have no children at this time, so we are assuming that your interest in this program was principally an informational one.

(CHILDREN TOO OLD)

b. You indicated that you have no pre-school age children, thus our pilot program does not meet your specific needs.

(CHILDREN TOO YOUNG--but some of day care age)

c. You indicated that at least one of your children is too young for inclusion in this pilot day care program. Because this program is so limited, we can only consider employee-parents who have no pre-school age children younger than the Commonwealth's minimum age for day care centers of 2-1/2. We do this on the theory that only under those conditions would the wife be completely free of child care responsibilities during the day to enable her to supplement the family income by working if she wishes to.

(CHILDREN TOO YOUNG)

d. You indicated that your child is too young for inclusion in this pilot program. (State law prohibits enrolling children under 2-1/2 years old.)