In response to requests for information on a city day-care program, a demonstration project for infants and toddlers, the Demonstration Nursery Center at the University of North Carolina, is reported. Physical makeup of the facilities is described, along with daily procedures and staff activities. To study the effects of day care on babies, a comparison was made with a non-nursery control group. Almost no differences were found in the areas of physical-medical, mental-motor-sensory, social, and emotional-personality development. The low rate of illness and absenteeism and the general satisfaction of the parents seem to indicate the lack of negative effects on young children of day care. The key concept is quality care, reproducing as much as possible the home environment and the best features of the "establishment" well-functioning nursery school. Quality is stressed in relationships, play experiences, and health care (by means of a Sick Bay). Goals still to be achieved are in areas of innovation in involving parents and grandparents, learning and social development in a mix of age levels in a group, and cost accounting. (LH)
A DEMONSTRATION PROJECT:
'THE GOOD LIFE' FOR INFANTS AND TODDLERS*

by

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At $1.50 per copy.
WHY A DEMONSTRATION?

If our daily mail bag and visitors' book are valid indices, then interest in the question of daytime care for babies in groups is widespread and deeply concerned.

"... tell us of your experience," [they write].

"... please send any study reports you have for distribution .."

"... our office continues to find daytime care of infants a crucial problem .."

"... we are beginning our intervention with children between the ages of one and two .."

From U.S. Senator Charles H. Percy: "I am myself engaged in legislative research in this field (daytime care of infants) and wish to request a copy of your report .."

Community groups and Foundation-supported project planners appeal to us for help and suggestions:

"... study of group care for infants ... will help lay the foundation in formulating a program for infants in a United Fund supported day care center here ... infant care will be offered for the first time this winter .."

"... as part of a project designed to facilitate the return to active professional life mothers who are nurses and physicians, we are making plans for setting up a day care facility for very young children as well as those over three years .."
Numerous expressions of interest and requests for advice come to us from agencies responsible for licensing and/or standard-setting:

From the Illinois Department of Children and Family Services:
"... we are finding a growing interest in group care for infants and the very young child developing out of the need for the mother to place her infant while she is employed ..."

From the Arizona State Department of Health, Child Day Care Health Consultant: "... we are in the process of licensing day care centers and are especially anxious to obtain all the information we can pertaining to infant and toddler group care..."

From the Department of Public Welfare, Commonwealth of Pennsylvania: "...we are currently in the process of developing ... standards for group care of very young children..."

Some requests for help and information come from teaching programs at all levels --- colleges and universities, manpower development programs for workers in day care, programs for teen-agers:

From the Chicago Board of Health, Director of Medical Social Service: "... we have been able to document the need for establishing day care centers for children younger than three years of age. Such centers would make it possible for the young mother to continue schooling or seek vocational training. ... As another part of the center program we will conduct group sessions for young mothers to encourage the quality of mothering..

From the New York City Department of Health: "... we are developing a plan for training of personnel to work in group day care of infants ... (and are) cooperating with another city agency and a voluntary agency in setting up an experimental center for infants and toddlers ..."

About one-fourth of the appeals for information and for permission to visit our program come from OEO-funded projects in the "Model Cities" program. The Parent and Child Centers see the necessity to be involved with families with very young children, extending the Head Start idea downward below age three, exposing both parents and babies to meaningful experiences that contribute richly to all-round development.
This active concern with the problem of caring for babies and toddlers in groups is timely, necessary, urgent. Interest is high but practical experience with such programs is limited. To persons interested in the healthy development of young children, the importance of demonstrating quality programs becomes of foremost importance.

WHY NOT BABIES IN GROUPS?

We cannot ignore the fact that we have by no means "proved" that care of babies away from their own homes, in groups, is not detrimental to healthy development. There are many among our colleagues who will say that this trend toward group programs will only lead us back toward "the dark ages" of child care...

The attitude generally held by pediatricians, psychiatrists, and professional social workers, and by informed parents toward the care of babies outside their own homes is to deplore any plan that involves bringing them into a group for all-day care. These attitudes in part have their roots in the now-classic "Bowlby report," published some 18 years ago by the World Health Organization. This report summarized studies relating to the long-term development of children reared in institutions, hospitals, or foundling homes, or in a succession of foster homes, studies that seemed to point to detrimental effects of these experiences that persisted, malignantly, into adolescence and adulthood. The conclusions drawn from the studies were (1) that health (and indeed life itself) is threatened by lack of a mother's care in infancy and by even rather short-term experience in the impersonal setting of an institution; (2) that babies above all need to be cared for by their own mothers or by a permanent substitute for her; and (3) that group care per se is detrimental to a baby's growth and development because it cannot possibly involve care by one mothering person.
Hence over the past twenty years there has been the widespread recommendation that if an infant needed daytime care to supplement that given by his mother, the only acceptable substitute would be another mother who could take the baby into her home for the day or a motherly person who could come to the baby's own home to care for him on a rather "permanent" basis.

In more recent years, this view of "maternal deprivation" has been refined by researchers. There has been a recognition that perhaps many of the detrimental effects noted were related to the drabness of the surroundings, lack of toys to stimulate the senses, impersonal caretaking by a constantly changing staff, and impoverished experience with being talked to and played with. The research literature now includes a number of studies of babies who grow up in homes where they experience "multiple mothering," of the effects of maternal employment on children, and at least one study of the physical and mental development of infants in day care centers. No study of short-term, intermittent separation from the mother --- such as a baby experiences in day care --- has thus far demonstrated the damaging consequences seen in "institution" babies.

There continues, however, to be an entirely appropriate and deep concern on the part of both professionals and parents that infants should receive individualized care, not "assembly line" attention in groups. The kind of care that safeguards health, builds trust in the world and competence to cope with learning, develops language and motor skills, and encourages social interests is of tremendous importance, for the crucial nature of all experiences in the first years of life is by now clearly recognized.
But just what constitutes adequate, high quality caretaking when it is supplied to infants and toddlers outside their own homes has never been subjected to systematic study. The out-of-home daytime care of children younger than two years would seem to present special hazards and to require continued evaluation of the experience for each baby and his family. There are now more questions than answers, more theories than facts, more programs than sound criteria.

A WAVE OF THE FUTURE?

Mothers of young children are returning to work when their children are still in infancy. The favored pattern in America today seems no longer to be for mother to wait until the children are in school, or through school, before seeking employment outside the home. Tremendous pressures are put on women --- from AFDC mothers to doctors, nurses, and other professional women --- to join the labor market. Competent household help is increasingly difficult to obtain. Day care home arrangements are available to and preferred by relatively few mothers. There have been developments in antibiotics, immunizations against the serious childhood diseases, diaper service, and some relaxation of the intense concern about the effects of "multiple mothering." There is new knowledge about the potentialities for learning in the early months and years of life, and a new appreciation for both the emotional and cognitive needs of infants. The Head Start idea for "disadvantaged" children is being extended downward into infancy. New educational efforts for teen-age mothers involve arrangements for the care of their babies while they continue in school and have access to programs of education for child rearing. All these trends and developments make it feasible as well as necessary that a new look be taken at the possible alternatives for infant care and that quality care be defined and demonstrated.
Can this possibly lead to a "bright new world" for our very youngest citizens? Is warm, affectionate, individualized mothering for an infant possible in a group setting? Can the beneficent intimacies of home life be replicated when infants and toddlers are cared for in groups? Can adequate protection of physical health be assured to babies who are daily taken outside their own homes? Can constructive social relationships be formed and appropriate intellectual stimulation be offered to children under the age of three whose mothers arrange for their care in a group? What is the cost of care that provides as fully as possible for the needs of babies away from home?

To produce answers to questions like these, a grant was made to the University of North Carolina at Greensboro by Children's Bureau, under the program of Child Welfare Research and Demonstration Grants. The project began with a planning grant in 1966, and in January 1967 funds were appropriated for the establishment of a Demonstration Nursery Center [and for evaluation of the Nursery Center] to continue until June 1970.
LIKE IT IS . . . . . .

THE DEMONSTRATION NURSERY CENTER . . . .

Strictly speaking, it is impossible to "tell it like it is" for this project of ours is no one way. It is more likely 21 ways, being perceived in as many views as there are persons working with us in our program. But insofar as the phrase implies candor and objectivity, let me use it and turn it on an attempt to describe what you would see if you arrived for a visit one day at our Nursery Center.

Later I shall give you the rationale for our demonstration — WHY we do what you see. For the present I shall be simply descriptive, your guide to the observable aspects of the Nursery Center.

You will find us in the education wing of a church building two blocks from the University campus. A new wing (it was less than two years old when we moved in in 1967), it has all the assets of newness found in modern church school buildings. It is fireproof, air conditioned, spacious, bright with paint, well lighted; it has flooring materials that are easily cleaned, built-in cabinets, and running water in a neat sink in every room.

(Parenthetically, you may come for your visit any time between the hours of 7:50 a.m. and 5:30 p.m. Mondays through Fridays, but we would probably have discouraged you from visiting on a Monday morning or a Friday afternoon as on each of these days, every week, the program of the Center is geared to our need to put away (or to take out again) all the "possessions" we have not shared with the church school on Sundays.
You would find our 22 babies and toddlers in four rooms on
the ground floor of the wing we occupy, and our eight three-year-olds
together in a room further down the hall. At this moment, as you
have your first glimpses of the babies themselves, I would challenge
you to differentiate among the children those from low versus middle
economic backgrounds, those whose families pay fees of $1.00 a week
and those who pay the full fee of $15.00 for the nursery service.
All our babies give an impression of good health, busyness, curiosity,
friendliness and trust, zest for living and learning. You could not
identify, I feel sure, the ones who are sons/daughters of University
professors and those who are the children or grandchildren of University
maintenance or grounds staff, workers in the laundry, etc.

Our "crib babies" -- in general, those who still have two naps
a day, ages three months to about 18 months -- occupy two sunny rooms
connected by a small toilet-lavatory. These two rooms are labeled,
affectively, "The Rocking Chair Room" and "The High Chair Room." The
twelve babies in these two rooms are cared for by the same three persons
each day. At waking times, play time, and dressing-for-outdoors time
(and at break-time and lunch-time for the caregivers) the babies are
familiar with a fourth person.

In a third room, across the hall, "The Red Wagon Room," you may
find four or five children around 15 - 20 months, the diligent,
exploring toddlers. They will be seen with one caregiver, with a helper
for the busy times of learning self-feeding, going off to sleep, getting
ready for outdoor play and so on.
The toddlers getting beyond 20 months of age, ready perhaps for toilet training and for a somewhat more structured play time, have home base in "The Playhouse Room", with its own private toilet and washing facilities. Here five or six children play and sleep and eat together, watched over by one continuing caregiver who also is given assistance during the "busy" times of the day and when her scheduled times for refreshment breaks and lunch come round.

All of these rooms are bright with color and alive with things-to-do. Attached to the walls you will find pictures, balloons, panels of interesting printed or striped cloth or paper, prisms hung in sunny windows. The cribs, of course, boast the ubiquitous mobiles, cradle gyms, and other equipment for sensory stimulation. The playrooms look much like a well-equipped nursery school for two and three-year-olds --- well equipped with lots of home-made, improvised equipment as well as more "traditional" picture books, records, toys, etc. In each room for the under-threes you will see some children sleeping while others play or are fed or dressed and diapered. In one room you may see no children for they have all gone for a walk together or are playing out-of-doors in the enclosed play yard.

Our group of eight three-year-olds, half of whom are in all-day care, have a room farther down the hall, near to a toilet and washroom that they must share with adults. They have a professionally trained nursery school teacher on a four-mornings-a-week basis and a nursery assistant who is with them all day.
In the entryways and halls you will see wheel toys, pull toys, strollers and carriages. We use strollers built for twins and some are capable of carrying four babies (two sitting with seat belts fastened and two standing in the 'rumble seat' behind the younger two).

You will find our cook --- and our kitchen and staff dining facilities and space for relaxing --- on the second floor of the building. You may not encounter our part-time janitor. He is a student in one of the local colleges and comes early mornings and again late in the day to do the heavy cleaning. You will meet our part-time receptionist/bookkeeper whose "office" is the entrance hall.

If on the day of your visit there are no absences among the seven members of our regular care-giving staff, you may find our professional staff available for a leisurely conference with visitors --- the Director, trained in nursery education and child development, the Associate Director with a background in psychology and in rearing her own babies, and the Nurse, an R.N. whose successful performance as a pediatric nurse in one of the local hospitals led us to employ her two years ago.

You might find our nurse in Sick Bay ministering to and keeping content one or two babies with minor colds or intestinal upsets. Or perhaps there will be a child recovering from an acute illness now in the stage of subsiding with medication prescribed by his pediatrician and carefully administered by our nurse. Sick Bay is in the sixth room we rent from the church. It is perhaps the most gaily appointed of all the rooms we occupy, with special toys and decorations kept just for that time-and-space. Contrary to all our expectations,
however, Sick Bay is more often vacant than occupied. (I shall have more to say presently about our findings in this regard). Sometimes Sick Bay contains one or two *healthy* children --- when the others in their "home room" all have something suspected of being contagious ("sniffles" or "loose stools").

You will not have been our visitor for long before you will have become aware of some of the limitations in our spatial and staffing arrangements. The most obvious is the inconvenient location and other inadequacies of our outdoor play space. It is only within the last half-year that we have managed to acquire a small, fenced-in, grassy, shaded area and have begun to furnish it with equipment suitable for threes-and-under. It lies around the corner of our building and to reach it requires a considerable trek across a large asphalted parking area. *Utopia*, in the dreams of our staff, is a place where each playroom opens onto a small, safe play-yard, where toddlers may run in and out practically at will, so that outdoor time need not become "a production" that takes into account the scheduled needs of 20 other children, where one adult can watch an "outsider" let off steam while several "insiders" play quietly or drift off to sleep.

Another less-than-ideal arrangement that the perceptive visitor may note has to do with our practice of keeping each group of children more or less self-contained within one room. This has the virtue of helping each baby feel he has a place --- with a familiar sameness --- where he belongs, with adults he knows well. It has the drawback of inhibiting exploration and activity. Our crawlers would dearly love to stream out the door each time it is opened, our toddlers would delight in crossing the hall to explore the toys in the room across the way.
And although routinely we arrange for exchanges of toys and equipment between rooms and frequently there is an extra pair of hands lent to a baby to "practice" his walking up and down the hallway, this seems no real substitute for the "run of the house" and the chances to "get into things" that the home-reared toddler enjoys and that every baby really needs.

When you visit us you will like and admire our care-giving staff, and you will see their enjoyment of the children and feel their involvement in arranging a good day for each baby. You will be aware of their pleasure in each baby's blooming health, emerging skills, and new learnings. Our seven Nursery Assistants (actually, there are eight assistants: 6 full-time and 2 half-time persons) range in age from 20 to 55 years, and each spends her days with the age group she enjoys most --- crib babies or creepers, toddlers or twos, or three-year-olds. These Nursery Assistants all have a minimum of a high school education, several have attended college. All have children of their own and like and enjoy young children. Three of them, in fact, have their own babies in our nursery. Several are with us to explore career possibilities in the field of infant-toddler care and were attracted by our program of on-the-job training. All, alas, earn very low salaries. (These positions are classified by our State Personnel Office as Nurse's Aides and salaries are at the minimum wage level).
And each of these women --- you would see this if you were at the Nursery when the babies were arriving or leaving --- is liked and respected by the parents of the children. The mothers stop to ask advice or to get a "final report" on the baby's day. When the baby needs care in the evening or on week-ends, some of our young fathers are apt to insist on employing that Nursery Assistant who cares for the baby at the Nursery Center.

LIKE IT IS... The visitor at the Nursery Center sees a lively, busy, cheerful place where babies and toddlers --- five or six or eight together in a group --- are cared for according to their own special needs, schedule, or level of development. Eating, sleeping, talking, playing, exploring, learning, under the protection of interested, informed, affectionate adults...
BUT IS IT GOOD FOR BABIES?

The purpose of the evaluative part of our project is to demonstrate whether or not there are any damaging effects of day care on infants. This is not, obviously, an easy task. Although many persons object to the separation of mother and infant, few have attempted to describe systematically the effects of such separation.

Our plan for producing some answers to the question, "IS IT GOOD FOR BABIES?" involves a study of the development of the children in the Nursery Center in relation to another group of children of the same age and background who are being cared for in their own homes --- the classic "control group" of medical, psychological, and educational research.

Our babies and toddlers in the Nursery Center are paired with "Home Babies", being matched on the basis of age, sex, race, education of parents, and where possible, birth order (position in the family). We have 14 well-matched pairs on whom there are repeated measures; some 10 other babies in the Center-Home groups are being studied although they do not satisfy so well all our criteria for matching.

What measures are we using as a basis for comparison? We have somewhat arbitrarily divided the significant areas of development into four. We have tried to measure development over time in those areas, and to ask whether or not there are differences between the 'Center' and the 'Home' babies.

1. Physical-Medical
2. Mental-Motor-Sensory
3. Social
4. Emotional-Personality
Let me describe briefly the measures we are using to assess development/growth in each of these areas:

1. **Physical-Medical.** In addition to an initial health record that is filled out by the parent and the pediatrician prior to admission to the program, there is a regular clinical examination by the project pediatrician at quarterly intervals until the age of 12 months and semi-annually thereafter. Height and weight measures are included in this examination and are plotted on the percentile grids developed by the Harvard School of Public Health. A system of randomly timed telephone interviews with the mothers keeps up-to-date our records of illnesses, accidents, and developmental milestones.

2. **Mental-Motor-Sensory.** The Bayley Infant Development Scales, together with the Stanford-Binet at appropriate ages, constitute our major standardized measures of mental development. In addition, we are exploring the usefulness of the Uzgiris-Hunt "Instrument for Assessing Infant Psychological Development," a scale based on Piaget's schemata. Two doctoral students in child development at the University have begun, just this spring, to investigate the feasibility of using this as an assessment device for our particular purposes.

3. **Social.** At the same time that the Bayley Mental/Motor tests are being given, we administer also the Vineland Social Maturity Scale and the PAR (Preschool Attainment Record). These scales are based on mothers' reports and on direct observation. The PAR is an unstandardized elaboration of the Vineland for ages 0 - 84 months.
4. Emotional-Personality. This area constitutes our major measurement problem. We have chosen to study behavior which might be expected to be appearing during this age span in which we are most interested --- 3 months to 3 years. Available theories of development, such as Freud's and Erikson's, suggest that ability to separate from the mother and ability to assert self independently are both significant developments during this period. We are using two "miniature real life situations" with high face validity to test our infants on these abilities. In the first, one of our testers measures the latency time before the infant will leave his mother and approach her, a relative stranger holding an attractive toy. In the other situation, the mother gives the child a new toy (brought by the testers). After his interest is aroused, she takes it away and substitutes an old, "stale" toy. The toddler's assertive behavior is observed and recorded. Another body of knowledge that has some implications for emotional-personality development is psychosomatic medicine. One might anticipate that psychological upsets or disturbances in infants would be evidenced by difficulties in eating, sleeping, toilet training, etc. We use our randomly timed telephone interviews to question mothers about variations and difficulties in these areas.

We have now been collecting these data on our 'Home' and 'Center' babies for 21 months. The results to date we find encouraging --- i.e., we find almost no differences between our control babies and the nursery babies. Performance on mental tests and ranking on the social development scale for our matched pairs show neither group superior to the other. Individual curves of raw scores on the Bayley Infant Scales and on the
Vineland and PAR are shown graphically in Figures 1 through 12 attached to this report. No elaborate statistical manipulations are required to convince one that no real differences exist between these children. It should be emphasized moreover that the matching was done by the Research Director who had not seen the children and before any testing was begun.

Can it be said, then, that group experience is not detrimental to infants and toddlers? We are by no means ready to lay claim to having "proved" any such thing! Paralleling such findings, it is necessary to describe what kind of group experience our babies had and what kind of home care the control children had. This is attempted in the section that follows, "WHAT MAKES IT GOOD?" (beginning on page 21).

Before going on to describe our model for "quality care", several further points may be made in relation to our evaluation efforts. The health records of our nursery infants are of interest. And the satisfaction of the parents with the Nursery experience is surely worth noting.

Health and Sickness in the Nursery. One day, some two years ago now, when we were looking over our new quarters in the church and preparing to admit our first babies, Dr. Ford, our Podiatric Consultant, said to us, "You know, I'm not at all sure this room will be adequate for Sick Bay. You realize, don't you, that there may be days when all the babies have to be in Sick Bay?"
No one is more pleased than Dr. Ford herself to have been proved dismally wrong on this point. The low rate of illness and absenteeism among our babies has been gratifying. This encouraging record can be credited in part to Dr. Ford's interest in the program. Her wise and sensitive supervision, and her continuing availability for consultation. In large part it also stems from a rather meticulous conforming to the regulations we have established for staff and parents to protect the health of the babies. (More of this later. See "Quality in Health Care," pp. 29).

Daily records are kept by the Nurse on each child's state of health. We are beginning an analysis of these records and find the results encouraging. Even in the months with the "worst" health histories (November and February, April and June), fewer than one-fifth (20%) of all possible child-attendance-days were days with children sick in the Nursery. Upper respiratory infections accounted for the most time spent in Sick Bay — 7% of possible attendance days; and gastro-intestinal disorders were responsible for 1% of the possible attendance days being spent in Sick Bay.

We would emphasize and support the well-founded anxiety of medical authorities (and of many parents) that to care for babies in groups is to expose them to numerous hazards to health. Only the most meticulous attention to details of staff health, handwashing, toy washing, floor cleaning, and other environmental safeguards will result in a milieu safe for the physical health of infants and toddlers.

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1 During the first year of the project, Dr. Ford consulted on a four-hour-a-week basis; at present she gives us two hours a week of consultation time.
No one, no agency or individual, who undertakes to care for a number of very young children together has a right to relax for one minute the precautions that will protect their physical health.

One more point in regard to evaluation of the demonstration: our drop-out families and our stay-with-us families. We have had very little turnover in the 22 months we have been in operation. In these nearly-two years, only five families have withdrawn their children from our Center. None, we are convinced, was withdrawn because of dissatisfaction with the program. Two families moved out of the city, two made arrangements for the care of the baby that they felt were more in the interests of other family members (other older children, father's working hours, etc.). And one mother decided she was just missing too much of the fun of caring for her baby, gave up her job, and is now staying home with him.

Six of our currently enrolled children have been with us since we opened the Nursery. Several of these have spent well over half their lifetimes in five-days-a-week living with us, and we have a significant "investment" in their development and growth.

Some weeks ago we sent a note to all our Nursery families asking them to tell us briefly, in writing, about their satisfactions and dissatisfactions with the program, about how they see the Nursery as contributing to (or retarding) their child's general development, how they view this as a form of "upbringing" for babies.
Here are some quotes from the informal notes they returned to us:

"From the beginning," [one mother writes], "I have been satisfied that my children are getting superior physical care. As I have observed the close ties which the Nursery Assistants and staff have developed for individual children, I have become convinced, both emotionally and intellectually, that the children are getting superior care in every sense. Both of my children are doing and learning things which I would not have known to show or teach them. I believe that they are busier and happier than they would be in any other situation. Both grandmothers are strong supporters of the day care idea since they have observed my children in the center . . ."

"We can give only favorable comments" [a second mother states] "as to the care R____ received and the progress made with the children attending the Nursery . . . We also feel [she adds] the fact of limiting the number in each group and having sufficient persons to care for them added to the success of your work . . ."

A third mother writes, in part: " . . . The staff has been most cooperative in working with us to improve K____'s sleeping habits . . ."

Another says: "We are delighted with G____'s experience in the Nursery. We are not aware of any ways in which his development has been retarded and on the contrary feel that he has learned a great deal, as well as having fun. Some of the principal benefits we have noticed are:

1) To quote his great-aunt in New England, he is neither shy nor show-offy, but seems to take new faces in his stride; we have privately made the same comment about other nursery children. 2) He has enjoyed a greater variety of toys and more space to run around in than we could have offered him. 3) He has always seemed eager to make each transition to a more grown-up way of doing things; we suspect that seeing slightly older children in the Nursery has helped him to accept these changes. 4) We have benefitted from informal discussions and advice from the nursery staff.."

One of our mothers took the opportunity to write at considerable length and in a gratifyingly positive vein. Only a portion of her note is quoted here: " . . . We both feel that the experience has been tremendously beneficial to C____ in many ways. Most important it has given him the opportunity to play and grow with other children. At home he would have been alone with me most of the time. Incidentally, we have been very pleased too that the nursery presented C____ with a perfectly natural integrated situation. He seems not to have perceived the difference between black and white people, but when he does he will have his own personal relationships to draw upon in developing understanding . . . There are many advantages to the program --- provision of good hot food, the fine toys and play equipment which we individual parents couldn't afford for our child, etc. --- but most important is the relationships C____ has been able to develop with such varied adults and children. We feel that this, along with the very obvious interest and concern which is apparent in every member of the staff for the welfare of the children, is the most important positive feature of the nursery program . . ."
One Model for Quality Care...

If this encouraging trend continues, if indeed we are able to demonstrate that over a period of two to three years no "statistically significant" differences appear in mental-social-physical-emotional development between children cared for at home and those cared for in our Nursery Center, shall we then conclude that infants and toddlers may safely be assigned to "centers" for daytime care?

There can only be a "No --- unless . . ." or a "Yes --- if . . ." answer to a question such as this. No, babies may not be expected to thrive in a group situation unless very special provision is made for 'individualizing' the care they are given. Yes, babies may be expected to do very well in a center if caregiving of a certain quality is provided.

The key concept here is quality care and it is important to emphasize that our findings cannot be interpreted apart from a description of the setting, the milieu, that produced them. Thus I shall attempt now to describe to you "the good life" that is afforded our babies and toddlers.

What is our model for "the good life"?

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2 The term "model" is used here not in the sense of a "model nursery", a program recommended to be copied everywhere because of its "ideal" conception and execution. Rather, our model for the good life is to be seen as one pattern, one way of viewing infant care, that seems to us to result in a "product" that most would find satisfactory.
Quality in Home Care

The pattern we have chosen to try to reproduce, insofar as it is possible to do so, is the home and mother often found among that currently much-maligned species, the middle class. We in this country today seem to be spending rather vast amounts of energy and money to emulate a system of care and rearing and teaching that is "normally" — i.e., casually and on the whole quite unselfconsciously — given to children in many middle-class families. And in our demonstration we have tried to base the program on what we can define as the strengths in well-functioning family life as those "positives" come across to a baby.

Obviously, one cannot possibly replicate family life and a mother's care in any group situation nor in an outside-the-home setting. One can, however, try to identify what a well-functioning family gives its children that helps them develop satisfactorily and then, within the limitations of another setting, provide those experiences as often as possible and in what depth is feasible.

If our babies, instead of spending six to nine hours a day in the Nursery Center, were at home with their mothers, what kind of "good life" might they be enjoying? They would be with persons to whom they are of tremendous personal, individual importance, with persons who notice what the baby is like, who observe ways in which he/she is different from any other baby they have known, who care about what he/she is learning, and who have learned much about how to make him comfortable and contented. He/she would be with people who lean over his crib and smile and talk to him, or babble in response to his babbling; who retrieve toys and teach pat-a-cake and peek-a-boo and other games dear to babies and adults for
as long as any of us can remember; who sing to him and rock him perhaps; who feed him when he is hungry and come to change his position when he is irritable or bored; who provide him with suitable toys and occasional playmates; who communicate enormous delight over his/her developing skills of creeping, standing, walking, adding words to his vocabulary; who encourage his mastery of the techniques of self-feeding and dressing and support his coping with the mysteries of bowel- and bladder-control. He/she would live each day in a setting where people watch for the kinds of things that "turn him on" --- toys, talk, words, the chance to explore the kitchen, the 'messing' in things, the clowning of brothers and sisters, the romp with daddy --- and, when he needs time alone, give him 'moments of peace.' He/she would be with people who are sensitive to his need for reassurance and comfort and who are not uncomfortable when limitations and frustrations and reproofs are in order. He/she would live a life that somehow and in the most important ways suits his particular temperament and his age, a life that has more order than chaos, more encouragement than scolding, more color and action than blandness.

Perhaps this is what LOVING is --- giving all this to a baby and toddler in his first two to three years. Can the essence of such complex experience be provided also away from home and family?

WHY NOT . . .

PERHAPS . . .

LET US TRY . . .
Quality in Group Living

There is available to us, also, an additional model for "the good life", and that is the well-functioning nursery school. Again, a traditional, middle-class, "Establishment" institution, now at times lacking status and appreciation as it competes with other approaches to the education of young children.

As a once-on-a-time practicing nursery school teacher, a teacher of two-year-olds, a nursery school administrator, I have a high esteem for the strengths that the field of nursery school education can bring to any model for group care. The skillful nursery school teacher has techniques for tempering the stimulation of group life to what the young child can tolerate with ease. Her training gives her a deep respect for the child's tie to his mother and family and encourages her to plan for a gradual transition from home to group life. The sensitive teacher has a working understanding of the young child's need to live and grow in an atmosphere of warm encouragement and benevolent support as he learns to live with age-mates and to cope with the complexities of interpersonal relationships. She has a lively enthusiasm for age-appropriate play equipment, songs, stories, and books, for first-hand experiences with nature, with art materials and music, with community life. A professionally trained nursery school teacher has a profound respect for the learning possibilities inherent in "free play" in a well-equipped, orderly, protected setting. And she has long been convinced that mothers and their children remain better friends if they need not be constantly together and if the child can relate to other adults -- warm, patient, flexible, non-punitive -- that he and his mother like and trust.
Transposing Useful Models to Infant Group Care

What do these models of sensitive caring about children "look like" when transposed to a group setting designed for day-long living with infants and toddlers?

Let us begin our look at this by considering the planning for a baby's transition from home to the nursery. Here we take our cues from the mother and father --- what they tell us about their child's routine times for sleeping, feeding, playing, etc., his preferences for toys, food, comfort, persons. And all this we try to provide in ways that will make the baby/toddler most comfortable and easy in his first days and weeks in the group. A "cue card" is prepared for each baby and is posted in the room where he "lives" in order that the staff may follow a consistent pattern in his care. These cue cards, modified weekly, sometimes daily, are used until our children are 15 - 18 months old and in a group where all four or five or six children share the same schedule of sleep and play and feeding.

Each group --- each room --- has one "in-charge" care-giving person who knows well each baby and his requirements. Other caregivers coming into the room to assist, to relieve her, or to supplement her care, take their cues from her (as well as from the cards). We try, within limitations that are obvious, to provide our babies with consistency in care-giving persons. But our Nursery is open for longer hours than a staff person's eight-hour working day. And we are meticulous about giving our staff a rest-break of fifteen minutes each morning and afternoon plus a forty-five minute relaxing lunch-time break. Clearly, our children experience 'multiple mothering' --- not, a great multiplicity of mothers, but rather care of planned consistency by two or three persons who know
them very well. We believe that the added variety and stimulation of contact with several interested, involved persons balances in a very positive way the potential trauma of too various an array of caregivers, and builds in our babies a kind of competence to cope with change.

Quality in Relationships

I have mentioned earlier the pride, pleasure and enjoyment our staff have in the children --- in the babies' developmental accomplishments and good health, in each child's special qualities, its readiness for new experiences. Observing any one of the groups of children, one cannot fail to see the two-way relationship of affectionate interest that exists between babies and Nursery Assistants. Several of the Nursery Assistants work the 9:00 to 5:00 or 9:30 to 5:30 shifts and so arrive after many of their children have come in and got settled. The drama of this arrival of the favorite or primary caregiver provides the most convincing evidence I know of the depth of relationship, of the feeling of belonging-together that can grow in a group situation. When Mrs. M comes into her "crib room", at 9:00 a.m., every baby that is awake is "all eyes" for her. The observer conjures an image of puppies with tails wagging, anticipating petting. Her babies, aware and beaming, wait for her greeting to each --- the pat on the cheek, the smile, the chuckle, and affectionate "Hi ..." The toddlers, more mobile, will come up to the later-arriving Mrs. W with a smile, a hug to the knees, a handing over of the toy in the hand, or a delighted attempt at calling her name.

All our babies are held for bottle feeding. Again, the observer watches with fascinated approval as the Nursery Assistant makes certain that each baby awake and not being fed is first made dry and comfortable.
and provided with interesting toys or something to watch in a safe
place (playpen, crib, or infant-seat) before she settles down,
relaxed and unhurried, to give one the bottle and the baby food.

Babies in high chairs are fed one or two at a time, perhaps
while others are sleeping or just waking from naps, so that they can be
talked to and, if ready, given encouragement as they practice some self-
feeding.

Dressing time and diapering time are occasions for playing,
talking, singing, games of "peek-a-boo" and "where's the baby's nose ...
eyes... ears... toes..."

Efforts at toilet training are rarely begun before parents and
staff agree that the toddler is ready. At that point, major responsibility
is carried by the child's favorite caregiver, the person from whom praise
and encouragement has special meaning.

Quality in Play Experiences

Let us begin our discussion of play time for infants and toddlers
with a confession: We are terribly old-fashioned in that we have a
deep respect for the importance of play and are convinced that children
do most of their learning "on their own" as they play. We belong to
that group of workers --- currently with very low status --- who believe
that children accomplish their most significant learning when left alone
to interact with an environment rich in things-to-do, an environment
changing often (but not too often), affording stimulation to the senses
of sight and taste and touch and hearing. We have no "curriculum" for
our babies, no "cognitive emphasis" or "compensatory teaching," nothing
of what Dr. Edward Zigler has called "... the whiz-bang remedial efforts
that have recently captured our attention ...." We have some concern about "pushing," about too much complexity. We do not share the currently fashionable twenty-first-century view that the baby or young child is a small computer which adults must program daily.

We believe that when children are very young, normally healthy and active, they may be left alone to accomplish their own learning. Supported by a natural curiosity and busy-ness, a pleasurable give-and-take between themselves and a vivid, varied environment inevitably produces learning, cognitive development. We leave our babies free to "take it or leave it", to make a choice at any one point in time. This is not to say that talking, showing, explaining, naming, reading, demonstrating how things work, have no place in our scheme of things. They are central to an environment that produces relevant learning and continuing growth.

But we turn again to the cues we can take from the mother and child at home, and our play environment reflects what mothers have long since discovered "turns children on" when it comes to play materials. Pots and pans, coffee pots, canisters, caddy bins on a turntable, nested cups and bowls, all from the kitchen utensil cupboard. Instead of the trash basket, our babies "mess in" the storage boxes that contain their own clothes, extra diapers, kleenex, toilet paper, powder, etc. One day last week five toddlers came in from outdoor play, each pulling a small carton with a rope handle and each carrying a plastic "ice cream pail" with an improvised handle of twine. The plastic "cores" from electric typewriter ribbons make wonderful rings-on-a-stick or clicking "treasures" to be carried about in a basket or an old purse. Scraps of cloth in all
sorts of textures --- felt, chamois, cotton, velvet, little rabbit pelts; sipping straws, dry cereal, shells, large buttons, keys on rings, cardboard tubes, oatmeal boxes, egg cartons, old playing cards, string, yarn ... Mirrows hung low... Balloons hung high...
And, of course, dearest of all to every child's heart, the great builder of "attention span" --- the chance to play in'water. And soapsuds...

Anyone who has watched toddlers amusing themselves at home can take it from here.

**Quality in Health Care**

One further important point about quality in our model for all-day care: what we do to protect health and to keep children safe. We feel strongly that children in the vulnerable under-three age should never be brought into a group-care situation unless the sponsoring agency is prepared to provide them the best of what is now known about health protection and safety.

Perhaps the prime requisite is a healthy staff. All our staff (from cook through Nursery Assistants to janitor and director) must present annually a physician's statement of satisfactory health status and a chest x-ray report. No adult is permitted to be in contact with the children if he/she has an upper respiratory infection or a gastro-intestinal disorder.

Meticulous handwashing we regard as the single most important precaution that can be taken to protect health. We are rigid in our requirement that hands be thoroughly washed after every diapering and before feeding a child. We teach our toddlers and two-and three-year-olds to wash hands after toilet, after play outdoors, and before eating.
Those who work with the children wear washable uniforms in soft colors, fresh every day. And the assistants who are with the infants put on top of this dress a colorful, soft "patient gown" when holding babies. For each baby, there is put each day in his/her personal storage box, a fresh "patient gown" that is worn by the caregiver when she feeds or holds that one baby.

We make use of the local diaper service. Frequent changes of diapers and use of caldesene powder has held diaper rash to the status of a minor problem.

All eating utensils and accessories are used once and then disposed of. We use spoons of plastic and plates, bibs, mats, cups, etc. of paper. In our first year of operation we used standard formulas in disposable bottles (Formil, Enfamil) but later switched to an arrangement whereby the parents bring the baby's formula in the bottles that will be required each day. The infants get the commercially prepared baby foods and/or junior foods. Meals and snacks for those on "table foods" are carefully planned and tastefully prepared. The mother of one of our children is a nutritionist; in exchange of a small reduction in her little daughter's fees she serves as consultant on our food program, checks our menus periodically, and takes an active interest in the children's health as it relates to food intake in the Nursery and at home.

Interestingly, we believe that having the Sick Bay has reduced rather than increased the incidence of illness in the Nursery. We regard our provision of Sick Bay as one of the important facets of the demonstration. We are told by mothers and by employers that for many women the final decision as to whether to accept gainful employment rests on the plans
they are able to make for the care of their children when sick. When
a mother in a low-income-producing job must stay home with her sick
child, it means loss of needed income; for a mother in a professional
position it often means delays, dissonance, or set-backs in important
work and/or extra burden on her co-workers. If a Sick Bay can be
shown to be feasible, this would be a tremendous contribution to the
whole field of day care.

A common-sense assumption could be made that both duration and
severity of illness in young children could be reduced by competent
nursing care in the very early stages of illness. If a mother need not
worry about missing time from her job, she will more readily cooperate
with the Center in reporting symptoms she has observed and thus a child's
illness may be "caught" and treated in the early stages. Quiet play,
extra rest, warmth, controlled humidity, meticulous administering of any
medication, the familiar and favored caregiver to provide an interesting
waking time, all contribute to the baby's recovery and the mother's
comfortable assurance that he is being adequately cared for. We are
accumulating records that should contain evidence as to whether this is
indeed the case and whether the cost -- in money, in staff, and in space
and equipment required -- is reasonable. Other infant care projects need
this kind of information to make intelligent decisions about the benefits
to babies and the feasibility, usefulness, and cost of a Sick Bay.
We have made a conscious effort to use Sick Bay -- and in fact all the contacts our children have with the nurse and doctor -- as a learning experience. We find gratifying our young ones' friendly, accepting attitudes toward persons who wear white uniforms and/or stethoscopes, their positive attitudes toward taking medicine, their interested cooperation in physical examinations and in first aid treatment. Children as well as staff practice "techniques" of wiping noses, sneezing and coughing, that protect rather than expose others to the hazards of infection.
Let me summarize briefly now what we see as the "finished" and "unfinished" business of the Demonstration. What are some of the outcomes, tangible and intangible, and what chores still lie ahead for our staff in the coming year? (Federal funds for the project will no longer be available after June 1970, so "the time is now" for us to consolidate our gains and to make plans for the future financing and sponsorship of the program).

On a practical level, we have discovered, we think, what it takes to provide quality care to a group of babies and toddlers. What it requires in equipment, supplies, services, food; what it demands in the ratio of adults to children; what is needed in the way of a daily program; what it takes to operate cooperatively in a shared facility; and we have an idea of what all this costs.

Our experience in operating the program has enabled us to take the leadership in writing a set of standards for the daytime care of infants and toddlers outside their own homes. These standards or "criteria" as written are descriptive of two levels of care --- "custodial" and "child development quality" care. The standards for infant care were prepared as part of a total effort, statewide, to re-write and update standards for health, program, administration, physical plant and equipment.
This revision was developed by the Institute of Government, University of North Carolina, in cooperation with the State Board of Public Welfare and involved professionals, operators of commercial enterprises for day care, and parents, both in preliminary discussions and in the writing. Final formal adoption of the new standards, including standards for infant care, awaits the outcome of legislation currently in the North Carolina General Assembly regarding the responsibility for mandatory licensing of facilities for daytime care.

An outgrowth of the standards statement is a series of leaflets "What Parents Should Look For ..." This series is in the planning stage at present, with a preliminary version of only one of the leaflets now available. This is the leaflet dealing with "Special Provision for Infants and Toddlers --- What Parents Should Look For." **

Other materials that document the Demonstration are in process and partly completed as of this date. These include: (1) a leaflet on health care and safety precautions for infant/toddler groups; and (2) a Handbook for working with non-professionals who are learning to care for babies and toddlers through on-the-job training in a Nursery Center such as ours.

Additionally, our agenda of unfinished business, of other hoped-for contributions, includes at least three items:

** Available on request from Infant Care Project, Institute for Child and Family Development, University of North Carolina at Greensboro 27412
We would like to "innovate" more than we have up to the present in ways to work with and involve the babies' parents and grandparents in the life of the Nursery Center. When mothers and fathers are both employed long hours on week-days, "traditional" kinds of parent conferences, visits, and meetings are neither feasible nor desirable. Finding ways to keep close contact and to protect each parent's investment in the baby is a tremendous challenge to all day care programs. We believe there must be ways to be creative in this area if intelligent efforts are focused in this direction.

We would like to explore more than we have in the past the opportunities for learning and for social development in a mix of age levels in a group, and in groups of different sizes. The question of caregivers' preferences in these matters is also a point for consideration and study.

We would like to obtain some help with cost accounting in the controversial and costly field of all-day care of infants and toddlers. Parents who wish care of good quality for their babies may need convincing evidence that this kind of service costs more—more than for older preschoolers and for school age children. Parents may be prepared to pay more for two or three years if they can see where the extra costs are "hidden" and what their dollars are buying in service and in child development.
FOR THOSE WITH SIMILAR CONCERNS...

SOME MATERIALS --- USEFUL, INFORMATIVE, STIMULATING

I. Our staff, professionals and non-professionals alike, have found particularly helpful the following books and pamphlets:


   [Especially the first five chapters: "A New Look at the Young Child: Development and Individuality." Also, Chapter 6: "Assessment of Infants and Young Children."]


11. Infant Care


[Especially chapters 2 and 3, "The Infant"; chapter 5, "The Toddler", and chapter 4, "Developmental Principles and Approaches."]

16. What to Expect of Baby from One to Twelve Months. A Camera Record. [from] Baby Talk Magazine. Co-authored with Department of Pediatrics, School of Medicine, Duke University. [no date]


II. Well-written pamphlets on a variety of topics are in demand by our staff, especially the Nursery Assistants, who like to read while they sit near children who are napping. The following agencies have booklets and pamphlets of particular interest to our staff:

1. Association for Childhood Education International
   3615 Wisconsin Avenue, N. W., Washington, D. C. 20016

2. Child Study Association of America, Incorporated
   9 East 89th Street, New York, N. Y. 10028

3. Metropolitan Life Insurance Company
   1 Madison Avenue, New York, N. Y.

4. National Association for the Education of Young Children
   1639 - 21st Street, N. W. Washington, D. C. 20009

5. Public Affairs Committee, Incorporated
   381 Park Avenue, South, New York, N. Y.

   259 East Erie Street, Chicago, Illinois 60610

7. Teachers College Press, Teachers College, Columbia University
   525 West 120th Street, New York, N. Y. 10027
   [Especially: Parent Teacher Series and Early Childhood Education. Series]

III. The following documents have been prepared in multiple copies in response to numerous requests. They may be obtained by writing:

   Infant Care Project
   Institute for Child and Family Development
   University of North Carolina at Greensboro
   Greensboro, North Carolina 27412

1. Suggested List of Equipment for Infant Center

2. Basic Understandings Between the University of North Carolina at Greensboro and the Presbyterian Church of the Covenant, Greensboro

3. A Summary of the Essential Understandings between the Demonstration Nursery Center and Its Patrons

4. Staff Responsibilities --- Job Descriptions
   UNC-G/Children's Bureau Demonstration Project


6. Brochure describing the Demonstration Nursery Center

7. What parents Should Look For ... Special Provision for Infants and Toddlers [Leaflet]
Fig. 1. Individual curves of raw scores for matched Center/Home pair.
Fig. 2. Individual curves of raw scores for matched Center/Home pair.
Fig. 3. Individual curves of raw scores for matched Center/Home pair.
Fig. 4. Individual curves of raw scores for matched Center/Home pair.
Fig. 5. Individual curves of raw scores for matched Center/Home pair.
Fig. 6. Individual curves of raw scores for matched Center/Home pair.

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Fig. 7. Individual curves of raw scores for matched Center/Home pair.
Fig. 8. Individual curves of raw scores for matched Center/Home pair.
Fig. 9. Individual curves of raw scores for matched Center/Home pair.
Fig. 10. Individual curves of raw scores for matched Center/Home pair.
Fig. 11. Individual curves of raw scores for matched Center/Home pair.
Fig. 12. Individual curves of raw scores for matched Center/Home pair.