



1967

Aspects of Maria Montessori's Educational Philosophy Applied to Contemporary Urban Kindergarten and Prekindergarten Programs

Mary Ellen Clark
Loyola University Chicago

Recommended Citation

Clark, Mary Ellen, "Aspects of Maria Montessori's Educational Philosophy Applied to Contemporary Urban Kindergarten and Prekindergarten Programs" (1967). *Master's Theses*. Paper 2119.
http://ecommons.luc.edu/luc_theses/2119

This Thesis is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Master's Theses by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License](https://creativecommons.org/licenses/by-nc-nd/3.0/).
Copyright © 1967 Mary Ellen Clark

ASPECTS OF MARIA MONTESSORI'S EDUCATIONAL PHILOSOPHY
APPLIED TO CONTEMPORARY URBAN KINDERGARTEN
AND PREKINDERGARTEN PROGRAMS

by

Mary Ellen Holden Clark

A Thesis Submitted to the Faculty of the Graduate School
of Loyola University in Partial Fulfillment of
the Requirements for the degree of
Master of Arts

February

1967

LIFE

Mary Ellen Holden Clark was born in Chicago, Illinois, July 16, 1927.

She graduated from Siena High School, Chicago, Illinois, in June, 1945 and received the Bachelor of Arts degree from St. Xavier College, Chicago, Illinois, in June, 1949.

Immediately after graduation from college she began teaching at St. Leonard's School in Berwyn, Illinois, and later entered the Chicago Public Schools. Married in 1952, she continued to teach in Chicago, with assignments at the Motley, Carpenter, and Young Schools as well as the Sumner and Wicker Park Special Summer Schools, until the birth of a son in 1964. She expects to return to teaching in the role of kindergarten or prekindergarten teacher in the near future.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION TO THE PROBLEM.	1
New emphasis on early education--Culturally deprived children--Maria Montessori's work with defective children--Normal children at the <u>Casa dei Bambini</u> --Montessori's reputation in the United States.	
II. PERTINENT ASPECTS OF THE PHILOSOPHY AND PRACTICE OF MARIA MONTESSORI	12
Maria Montessori's vision of the child-- Sensitive periods--Freedom and the individual-- Role of the teacher--Class size--Age grouping-- Discipline--Exercises of the practical life-- Materials for sensory education--Intellectual development.	
III. A SURVEY OF SELECTED KINDERGARTENS AND PREKINDERGARTENS	40
Description of selected kindergartens and prekindergartens--Appearance of classrooms-- Equipment--Individual versus group instruction and activities--Role of the teacher--Discipline-- Teachers' reactions to Montessori.	
IV. APPLICATION OF MONTESSORI'S PHILOSOPHY TO CONTEMPORARY URBAN KINDERGARTENS AND PRE-KINDERGARTENS.	51
The culturally deprived child--Slum living and child development--The slum school--Importance of Montessori's emphasis on individual and freedom to the urban child--Reasons for stressing exercises of the practical life and sensory education--Passive role of the teacher-- Description of the Montessori-inspired classroom--Criticisms--Difficulties.	

V. CONCLUSIONS AND RECOMMENDATIONS.	73
APPENDIX I SCHOOLS VISITED.	79
APPENDIX II CHECKLIST USED IN SURVEY	81
BIBLIOGRAPHY	85

CHAPTER I

INTRODUCTION TO THE PROBLEM

With the current emphasis on preparing all of the youth of America to take their places as intelligent, functioning, productive citizens of the country and the world, much attention is being directed to the education particularly of culturally and economically disadvantaged children in large urban communities. The appalling drop-out rate and the growing number of young unemployables are cause for national concern. Surveys and reports on the failure of education in urban areas focus on such problems as de facto segregation, bureaucratic school structures, aging buildings, insufficient books and materials, incompetent and indifferent teachers and principals, pupil mobility, and so on. But more and more educators are beginning to fear that the problems are even more basic to the organization and curricula of the schools. Many express the opinion that the slum child begins school with a built-in propensity to failure resulting from his deprived home life. Indeed, "all the evidence today indicates that children from a home background that not only is economically and socially at the lowest level but lacks family orientation

towards formal learning is virtually excluded from success in school. They are pre-conditioned for failure. The school, attuned as it is to the middle-class majority, seldom helps such children catch up; it often actually, though unwittingly, widens the gap between success and failure.¹

Therefore, more and more emphasis is being put on pre-school or early education. Kindergartens and prekindergartens are opening at a very fast rate. And so they should, for psychologists and physicians are beginning to indicate that Maria Montessori was right more than fifty years ago in stressing the importance of the early years of childhood. The idea of fixed intelligence has been denied; indeed, research shows that intelligence grows greatly in the first eight years — most significantly in the first four or five. Yet traditionally children below the age of six were thought too young to benefit from intellectual stimulation. The precious early years were spent in play. What a waste of the child's time and what a frustration to the little one who is striving to build his personality from the chaos about him, to perfect his skills, and to increase his intelligence. As J. W. Martin points out, "We have accepted too dogmatically normative ideas, which have suppressed our creative thinking about exciting goals which could be accomplished"

¹

Fred M. Hechinger, ed., Pre-School Education Today, New Approaches to Teaching Three-Four, and Five Year Olds (Garden City, New York, 1966), p. 2.

My point is that our notions of children's capacities to learn have come from studies of children who have learned inefficiently because we have taught poorly. We have confused what six year olds can learn with what six year olds have learned. Paradoxical-ly, we have been seeing clearly in recent years that in a slum school when teachers' expectations of children's capacities to learn are depressed, the children learn less and less the longer they remain in such a school. We are now becoming aware of the similar consequences of child-development concepts, which by fixing our expectations, have been producing the same lowered expectations of children's capacities.²"

Attitudes are changing, and play is no longer thought to be the only fit activity for pre-schoolers. The Head-Start program, the publications of the Delacato findings at the Institute for Human Potential, the revival of interest in Montessori are but a few of the indications that early education is receiving and will continue to receive the attention, time, money, and thought necessary for success. Such education is not limited to the culturally disadvantaged or to urban children; it is a shame to waste the time and talent of any child. No country can afford to squander human potential. But it is with urban children, especially with the culturally and economically disadvantaged, that

2

J. W. Martin, "Montessori After Fifty Years," Teachers College Record, LXVI (March, 1965), 553.

this paper is concerned.

The particular interest of this paper is with the programs which will be presented to these children. One is concerned that the education so hopefully lavished on these little ones is the best available. How much thought has been given to the needs of the children in question? What evaluation of method and philosophy has been engaged in? Are pre-school programs merely watered-down kindergartens? Are they only very expensive (to the taxpayer) baby-sitting services? What can or should be done as a new approach to the nursery school child?

The following criticism of the Head Start program indicates that these questions are not being answered. "Recognizing that Head Start falls into the category of a major governmental miracle in having started at all, many of the features of the 1965 summer program limited the value of this strategic and vital project. The 'off-target' group served; the well-motivated but less well-trained leadership at the classroom level; the paucity of specialized methods and materials; the preoccupation with testing and examining on pre- and post- basis; and the short term and truncated nature of the program — all combined to cut down the potential of this national venture."³

In our rush to establish such programs — and rush we must

3

William C. Kvaraceus, "Programs for the Disadvantaged: Promise or Pretense?" The National Elementary Principal, XLV (February, 1966), 63.

since human life and human potential are at stake — let us take a little time to plan our program. Let us re-examine successful programs such as the Montessori method. There should be much to learn from a careful evaluation of the philosophy and practice of the founder of the Casa dei Bambini.

Maria Montessori, an Italian physician and educator, lived from 1870 to 1952. During her long life of study, lectures, writing, and founding schools, Dr. Montessori was the center of some controversy and much adulation. Extravagant claims by her enthusiastic followers, even today to some extent, alienate those who would learn from the "Dottoressa's" work. To credit Maria Montessori with "changing the course of modern education," with changing "even the physical aspects of elementary schoolrooms . . . from dull regimentation to cheerful informality"⁴ is to ignore others such as Dewey, Bode, Counts, and Kilpatrick, not to mention Pestalozzi and Froebel. "The powerful cult of the personality which surrounds the image of the 'Dottoressa' at once sustains and burdens those who work to resurrect the long-slumbering ideas of the Montessori 'way.' The reawakening is supported by a widely-based interest in the influence and importance of early years on the development of children among

4

E. M. Standing, Maria Montessori: Her Life and Work (New York, 1957), cover notes.

educators and psychologists alike."

In the tradition of Rousseau, Pestalozzi, and Froebel, Maria Montessori saw the child unfolding as a flower in the sunlight of the "prepared environment." Although the Montessori approach as we see it today may look a little rigid, Dr. Montessori was most flexible as she learned about children by observing them. Rather than imposing a system on them she allowed them to lead her to unveiling the system.

Her first work was with "defective" children in "lunatic asylums" in Rome. The more Dr. Montessori studied and observed these unfortunate children, the more she began to take issue with contemporary beliefs about their condition and care. "It became increasingly apparent to her that mental difficulty was a pedagogical problem rather than a medical one. She came to believe that, with special educational treatment, their mental condition could be immensely ameliorated, a view she found to be shared by the French doctors Jean Itard and Edouard Séguin and a few others."

Relying on her scientific training, she stood aside and watched her charges. Allowing them to lead her by indicating their interests and adapting some of the apparatus used by Séguin, Montessori developed her didactic materials. These

5

Terry Denny, "Montessori Resurrected: Now What?"
Educational Forum, XXIX (May, 1965), 436.

6

Standing, p. 28.

materials will be described later, but suffice it to say that they followed the children's needs and interests. And they were successful. Indeed the materials proved to be so effective that these so-called defective children, who had originally been thought to be hopeless idiots, were able to pass state examinations required of normal children. In some cases their scores surpassed those of normal children.

Moved by such success, Dr. Montessori wondered why normal children could not do better; she wondered whether her apparatus and method would lead to even greater success with normal children. As she herself wrote in 1912, "I felt that the methods which I used had in them nothing peculiarly limited to the instruction of idiots. I believed that they contained educational principles more rational than those in use, so much more so, indeed, that through their means an inferior mentality would be able to grow and develop . . . little by little, I became convinced that similar methods applied to normal children would develop or set free their personality in a marvelous and surprising way."

When the owner of a tenement in the San Lorenzo slum district in Rome decided, with enlightened self-interest, to provide space for a nursery school, Montessori found her opportunity to

try out her theories on normal children. The results were spectacular. Educators as well as royalty flocked from all over Europe and America to observe these little slum children who walked, spoke, and treated one another with the courtesy and grace of courtiers, who practiced silence with no sign of teacher discipline, who "exploded" in a fever of writing at age four. "Thus, she began the educational work that brought her international acclaim. Madame Montessori remains the only woman educator to achieve such renown."

Unfortunately, in the United States such notoriety was short-lived. Articles and books by such eminent and popular writers as Dorothy Canfield Fisher had helped to stir up national interest, but as time went on fewer and fewer articles appeared. William Heard Kilpatrick, an apostle of John Dewey, administered the death blow in his writings and lectures at Columbia in which he alleged that "the content of her doctrine . . . belongs to the mid-nineteenth century, some fifty years behind the present development of educational theory."

It was not until the late 1950's when Nancy McCormick Rambusch started her Whitby School in Greenwich, Connecticut, that enthusiasm for Montessori's ideas reappeared in the United States.

⁸
A. Burnett, "Montessori Education Today and Yesterday," Volta Review, LXV (May, 1963), 235.

⁹
William Heard Kilpatrick, The Montessori System Examined (Boston, 1914), pp. 62-63.

In a recent brief article in Educational Leadership, James L. Hymes expresses surprise at the renewed interest in Montessori and suggests that it "has been stimulated by astute magazine publicity, rather than by any new discovery or research or professional insight."¹⁰ He goes on to list rather superficially some differences in a total Montessori program and that of other schools. Perhaps had he taken more care and time he would have found that new discoveries and insights, especially psychological, as well as changed horizons in education encourage heightened interest in Montessori.

It was, in fact, the publicity given to findings of physicians and psychologists in the lay and professional press which first encouraged the author to embark on this study. Emphasis on the importance of early learning, added to the evidence of the spectacular failures in the education of the culturally deprived, emboldens this former Chicago Public School teacher to look for a more successful plan of education. As a mother who has watched with wonder the amazing rate of intellectual development in very young children, the author is concerned about the growth and development of children in less privileged environments. When she returns to teaching, the author hopes to work with kindergarten and prekindergarten children in areas of extreme poverty and cultural deprivation. But even before that time, it is hoped

10

James L. Hymes, "Montessori," Educational Leadership, XXIII (November, 1965), 129.

that the findings of this study will be put to use in the schools of Chicago. Thus, as a parent, a citizen, and a teacher, the author wishes to investigate the theories of Maria Montessori, to examine current kindergarten and prekindergarten practice, and to make suggestions for integrating some of the theories of Maria Montessori.

There are certain limitations to the study. Not all of the works of Maria Montessori will be examined. Those concerned with education at higher levels and with religious training are not considered relevant; nor is much of the periodical literature dealing with handicapped and retarded children pertinent. The author is primarily concerned with underprivileged children. Perhaps Montessori has much to offer to the children of the rich, but such is not the concern of this paper. Aside from the Cabrini Montessori Center and, in a more limited way, the Ancona Montessori Center, schools in the Chicago area which show Montessori theories in action are concerned with the middle and upper classes. The object of this paper is not to argue for replacing traditional kindergarten and prekindergarten programs with a pure Montessori school. Rather, it is hoped that Montessori ideas can be found which will be applied to current programs in such a way as to make them more effective. Such suggestions as are made are those which seem likely and possible to implement in a slum school with its young teachers.

Within the framework of these limitations, as well as such

elements as the author's limited knowledge, industry, and experience, it is hoped that a worthwhile work will be produced.

CHAPTER II

PERTINENT ASPECTS OF THE PHILOSOPHY AND PRACTICE OF MARIA MONTESSORI

This analysis of the philosophy and practice of Maria Montessori treats of those aspects of Montessori's thinking which have value for contemporary urban kindergartens and prekindergartens. Certain points of Montessori's thought which have become commonplace — child-sized furniture, classrooms which are cheerful in appearance and atmosphere, teachers who are kindly and interested — are not considered. Other aspects such as the teaching of religion and the place of the imagination do not seem to be of general enough interest. Rather the aspects considered are those which have significance for current classroom use. Thorough study of Montessori's writings seems to indicate the following areas of interest to be worthy of consideration: Montessori's view of the child, freedom and the individual, the role of the teacher, discipline, the exercises of the practical life, sensory education, the techniques of education of the intellect.

Although the language seems high flown and flowery, Maria Montessori was sincere and serious in envisioning the child as

the future -- mankind in formation. To Montessori every child carries within himself the seed of the man to come. Unlike animals, children are born unable to take on their role in society. If left without human company, the child will not even learn to talk. "As the child's body must draw nourishment and oxygen from its external environment, in order to accomplish a great physiological work, the work of growth, so also the spirit must take from its environment the nourishment which it needs to develop according to its own 'laws of growth.'¹" The child is working to make a man, and to do this it is not sufficient that his body grow to adult size. "The most intimate functions of the motor and nervous systems must also be established and intelligence developed. The functions to be established by the child fall into two groups: 1) the motor functions by which he is to secure his balance and learn to walk, and to coordinate his movements; 2) the sensory functions through which, receiving sensations from his environment, he lays the foundations of his intelligence by a continual exercise of observation, comparison, and judgment."²

Montessori felt that the child's development follows a regular pattern. The stages in the child's development she called

¹ Maria Montessori, Dr. Montessori's Own Handbook (New York, 1965), p. 32.

² Ibid., pp. 34-35.

the sensitive periods:

From a study of the different ways children react under the different sensitive periods, one fact stands out with remarkable clearness, viz., that during the period up to seven the child possesses a different kind of mind from that of an adult. . . . To distinguish this sort of an intelligence from that of an adult we have called it "the absorbent mind." We may divide the epoch of the absorbent mind into two sub-stages; the first (one-three years) in which the child's mind works unconsciously; and the second (three-six years) in which the process of absorbing becomes increasingly self-conscious. But the essential thing, all along, is that the assimilation of knowledge is a spontaneous activity directed by the urge of the various sensitive periods through which the child passes. This reveals itself in a "love for the environment" which "burns without consuming" and builds up the personality.³

Particularly interesting are the sensitive periods of order, language development, socialization, refinement of the senses, and mathematics. Through spontaneous activity children find learning during the sensitive periods not only effortless but necessary. They seem to have a burning desire to learn. These periods are not fleeting glimpses of brilliance; they last for many months — even several years. But when they have passed they do not return.

Thus, during the sensitive period for language a child learns his native tongue — its vocabulary, grammar, and syntax. At the same time he easily learns any other language to which he is exposed. He learns apparently effortlessly. How unlike the struggles of adults or even high school students with a foreign

3

Maria Montessori, The Child in the Church (St. Paul, Minnesota, 1965), p. 57.

language. "At this period of life, by the mysterious linking up of the auditory tracts and the motor tracts of articulate language, it seems that the auditory perceptions have power to excite the complicated movements of articulate speech, which develops instinctively under these stimuli as if awakening from the sleep of heredity. It is well known that only at this age is it possible to acquire all the characteristic modulations of a language, which it is useless to try and establish later."⁴ During this period of sensitivity for language — about two or six years — Montessori feels a child should be exposed to hearing extensive vocabulary. Scientific and technical terms can be introduced easily at this time. "Written language can be acquired much more easily by children of four years than by those of six years of age."⁵ Yet we conventionally demand that beginning reading and writing be put off until age six.

The sensitive period for order is most significant and important since it is through ordering the environment that the child builds his personality. He is confused and at times physically as well as psychically irritated to find things out of place. Numerous examples can be given of temper tantrums resulting from a sugar bowl top being off or a hat resting on a chair instead of

⁴ Maria Montessori, The Discovery of the Child (Madras, India, 1948), p. 306.

⁵ Maria Montessori, The Formation of Man (Madras, India, 1955), p. 110.

a rack. While some of these examples seem fanciful, observation (and Maria Montessori urges over and over the value of observation) of any two- or three-year-old will indicate that the need for order is very real. What implications can be drawn from a realization of this sensitivity? The parent or teacher will endeavor to preserve the child's calm by preparing an ordered environment. Shelves for storing toys and equipment will enable the child to find things in the same place day after day. Furniture will not be moved around without reason and then infrequently. Children must be allowed freedom to take things out and return them to their places. It is possible to train a child naturally and easily in a life-long habit of order and neatness if such training begins during this sensitive period.

Because the child is in "a constant state of growth and metamorphosis, whereas the adult has reached the norm of the species,"⁶ children have a different rhythm of life than adults. A child feels that he has all the time in the world. And he needs the time to observe and absorb the environment. So, while a child needs order, he must have freedom to act according to his own rhythm.

"Unlike Rousseau, who contended that civilization corrupted the child, Montessori held as do Erik Erickson and Theilhard de

⁶
Nancy McCormick Rambusch, Learning How to Learn (Baltimore, 1962), p. 16.

Chardin that man's absorption in work is not a diminishment, a curse, or a threat to the levels of his existence. Montessori saw in work man's mastery over nature and believed that a conviction of the value of work and its capacity to satisfy man should be offered children at an early age.⁷ Work is essential for the child. Montessori found children preferring to work with manipulative and didactic materials rather than to play with toys. His intellect demands exercise just as his body does. A child takes pleasure in learning to walk, in walking backwards, in running and jumping. Some of what adults think of as over-activity in the child is merely enjoyment in developing large muscle skills. So, too, intellectual work is a real joy for the child. Provided with proper stimulation at the proper time he will choose such work over play.

Not everything a child calls work is so recognized by adults, but he is deadly serious about its importance. Thus, he is insulted and infuriated when he is arbitrarily taken from such important work for trivialities such as naps, group singing, and games. This interruption is especially maddening when the teacher's manner is abrupt and even rude. X

In discussing the child as seen by Montessori we have not found the headstrong thoughtless run-about so often encountered

⁷
Nancy McCormick Rambusch, "Montessori Approach to Learning," National Catholic Educational Association Bulletin, LVIII (August, 1961), 321.

in classrooms and nursery schools. Rather, we see a quiet, almost silent, busy, serious, yet happy worker. Montessori does not show us a pile of broken toys nor the sound of quarrels. The child who is free in a prepared environment is serene, careful, graceful, thoughtful, courteous, alert, with an "absorbent mind," constantly learning and practicing what he has learned.

"People like Deutsch, Bruner, Moore, and Hunt in the United States, and Maria Montessori before them — see the child . . . as an 'open system,' They are interested less in what the child is than in what he can become, and their aim is to provide whatever materials and techniques are needed to develop the child's intellectual abilities to the fullest. This is a far cry from the so-called 'life adjustment' approach so popular in the United States a while ago; indeed, it is the very opposite, since life adjustment assumed irreversibility of the child's nature."⁸

Of paramount importance is the notion of freedom. In fact, the Montessori approach to education at any level can be reduced to these few words: freedom in a prepared environment. The child must be allowed to develop at his own rate without undue encouragement and surely without restraint — except in so far as safety requires. The environment must be prepared so that the child can find it meaningful in order to sort out the chaos around him.

⁸

Charles E. Silberman, Crisis in Black and White (New York, 1964), p. 285.

As a corollary to the emphasis on freedom Montessori insists upon respect for the child as an individual. The amazing courtesy of the Montessori slum children is partly the result of the polite, almost courtly attitude of the directress to her little ones. Rushing a child to finish a task, scolding him, bossing, forcing him to join a group are all unpardonable assaults on his individuality.

The individual is the key to Montessori's philosophy. The child is taught, or rather teaches himself, as an individual. "The central idea of the Montessori system, on which every detail of technic rests solidly, is a full recognition of the fact that no human being is educated by anyone else. He must do it himself or it is never done."⁹

Group activities are not an essential part of the Montessori method. Certainly they have a place, but groups are selected by the children themselves who may choose to work in two's or three's. Group activities as such include singing, outdoor games, and meal or snack times. Contrary to the more or less conventional Froebel-influenced primary and kindergarten programs, children are not grouped for instruction. Generally speaking the Montessori directress explains with very few words but by showing the use of the material to each child individually. To traditionally orien-

⁹

Dorothy Canfield Fisher, The Montessori Manual (Chicago, 1913), p. 19.

tated teachers such individual instruction may seem to be a waste of time. But, of course, it is not. It is group instruction which wastes time since even in a very small group not all children can be ready and interested at a given moment. Group activities waste the time of the child — a really serious waste.

Support for Montessori's emphasis on the individual rather than the group can be found in Piaget, the Swiss psychologist, "There is as we have said no real social life among children of less than seven or eight."¹⁰ In contradistinction to socialization, there is the notion "that the child has to learn who he is; and he has to, in some measure, learn to get along with himself before he is capable of getting along with anyone else — or indeed before he is even capable of being aware of the existence of anyone else."¹¹ Emphasis on the individual causes each child to be allowed all the time he wishes with a particular piece of equipment. Despite the widely held notion that the attention span of little children is very short, Maria Montessori observed her young charges spending long periods of time on one task — having completed an exercise the child repeats it over and over seeming to enjoy reinforcing the learning activity.

Thomas J. Banta, in an address to the Cincinnati Pre-School

¹⁰

Jean Piaget, The Language and Thought of the Child (New York, 1926), p. 57.

¹¹

Rambusch, Learning, p. 28.

Education Council on September 15, 1965, stressed the fact that to him the single, most urgent characteristic to develop in educating children is autonomy. In exploring philosophical and psychological bases for developing autonomy, he cited Montessori as a school of thought with autonomy as a goal. "Each Montessori classroom varies in content and style, but there seems to be a particular philosophy and spirit that transcends these local features, whether it be Chicago, Denver, or Cincinnati and whether the classroom be quiet or active, outdoors or indoors, in groups or alone. The spirit is autonomy via interesting projects for the child growing into an adult through the education in his childhood."¹²

In the Montessori system with its emphasis on freedom and individuality, the role of the teacher will necessarily be somewhat different from the traditional conception. She is definitely not the center of attraction. "The Montessori method lays emphasis on the provision of facilities and protection for the child by the teacher. It lays emphasis on observation and discovery by the pupils."¹³ Thus, the teacher's role is two-fold; she is a preparer and an observer. Any suggestion she has to give is given most indirectly and discreetly. Her suggestions

¹²

Thomas J. Banta, "Educating Children for Adulthood," Young Children, XXI (May, 1966), 278.

¹³

María Montessori, What You Should Know About Your Child (Adyar, Madras, India, 1961), pp. 145-146.

show themselves in her preparations — that is, in what she has ready for the children to use. Her role as observer is critical. She must know where each child is physically as well as intellectually at all times. "A candidate for Montessori training should possess a more than average amount of flexibility . . . (she) needs to appreciate order, while at the same time, prizing freedom . . . needs a greater sensitivity than the average teacher to children, that is, to their needs, to their motivational patterns to individual differences . . . the Montessori teacher needs a¹⁴ keen sense of observation."

She allows the child complete freedom, freedom to make mistakes as well as to perform correctly. Through her respectful, watchful attitude the teacher encourages the child to learn and work for the pleasure of work — not to please her, a substitute mother. "Montessori freely conceded the tremendous influence exerted by Pestalozzi, Froebel, and Rousseau on the changing conception of the teacher, but shrewdly suggested that learning for love of the teacher, rather than for fear of her, represented limited progress. Learning for one's own sake, to meet one's own criterion of success, was what made learning satisfying to the young child, Montessori maintained. 'Help me to do it myself' was the message she had received from the countless, wordless

14

Virginia Fleege, Standard Operating Procedure for a Montessori School (Oak Park, Illinois, 1964), p. 12.

15
children she had seen in the Roman slums."

It is significant that Montessori calls her teacher a directress. Although the title sounds awkward to non-Latin ears, director she is. One should have difficulty finding the teacher in a Montessori class; she has no desk.

To some degree Montessori's emphasis on the changed role of the teacher was a reaction against authoritarian teachers of the last century. To that extent it is not pertinent to this discussion. But even so-called creative and democratic teachers lead more than Montessori would allow them to. The Montessori directress is not a substitute mother. Much of her work is done before and after class periods preparing materials. Indeed, during the classtime she is ordinarily silent. When she speaks, her voice is soft, her words are uttered slowly and distinctly, they are few. In demonstrating the use of materials she shows rather than describes the procedures.

The Montessori type of teacher encourages the method of instruction which has "the objective of leading the child to discover for himself. Telling children and then testing them on what they have been told inevitably has the effect of producing bench-bound learners whose motivation for learning is likely to be extrinsic to the task at hand — pleasing the teacher, getting

15

Nancy McCormick Rambusch, "Introduction," Dr. Montessori's Own Handbook (New York, 1965), p. 11.

into college, artificially maintaining self esteem. The virtues of continuing discovery are of two kinds. In the first place, the child will make what he learns his own, will fit his discovery into the interior world of culture that he creates for himself. Equally important, discovery and the sense of confidence it provides are the proper rewards for learning. They are rewards that, moreover, strengthen the very process that is at the heart of education — disciplined inquiry." ¹⁶

Discussion of the role of the teacher leads to a consideration of class size. In her Casa dei Bambini Maria Montessori started out with over fifty children. Since the children are expected to work individually and independently, it is possible to have rather large classes. The children should neither want nor expect a great amount of help or attention.

In actual practice in this country Montessori schools have twenty to thirty children per class — that is, for one director-ess and one assistant. But the class does not begin so large. Starting with only a few — ten or so — the group is enlarged by no more than one or two at a time until it is "normalized" at mid-year at about thirty. There are obvious advantages to gradual buildup of the class. The original group of children sets the tone and patterns into which newcomers fall as they arrive.

16

Jerome S. Bruner, "After John Dewey, What?" in American Education Today, edited by Paul Woodring and John Scanlon (New York, 1963), p. 48.

Related perhaps to class size is the composition of the class. In Montessori's first class at the Casa dei Bambini and in many Montessori schools today children from age two and a half to six can be found in one class. Although several Montessori schools in the area are more rigid in their groupings, the advantage of varied ages can be great. For example, the older children can help the little ones. The younger ones learn and are encouraged and inspired by watching the five- and six-year-old's performance. Competition, not a desirable trait by Montessori's standards, is not so likely where children of different ages and abilities are together. Rather, a spirit of cooperation, helpfulness, and mutual interest and joy in learning is likely to develop.

Montessori's insistence on freedom for the child and the passive role of the teacher causes one to question her opinions on discipline and classroom management. "Discipline must come through liberty. Here is a great principle which is difficult for followers of common-school methods to understand. How shall one obtain discipline in a class of free children?"¹⁷

Indeed, there has been much confusion about discipline and Montessori; many educators accuse Montessori of letting children do just exactly what they like. Such was surely not Montessori's idea. Of course, the child must be free. Without freedom there

¹⁷Montessori, Method, p. 86.

can be no self-discipline, and it is self-discipline that Montessori sought to develop. Such self-discipline will be carried through life.

But there is a limit to the liberty of the child — the collective interest. "We must, therefore, check in the child whatever offends or annoys others or whatever tends toward rough or ill-bred acts."¹⁸ Establishing sensible self-discipline with the child able to judge what is good and acceptable behavior is much more difficult than the traditional rule of silence and immobility. Or at least it is more difficult at the beginning. But once it is established in the child, inner discipline does not require that the teacher be in constant attendance to guard against outbreaks of violence.

Often, "the naughtiness of small children is a manifestation of defence or of unconscious despair at not being able to 'function' during that period on which the whole future depends and every hour of which brings progress. Naughtiness can also be a form of agitation caused by mental hunger when the child is deprived of stimuli of the environment or prevented from acting in that environment. The 'unconscious aim' then of moving ever farther from its realization creates a kind of hell in the life of the child who becomes separated from the leading source and the

¹⁸

Ibid., p. 87.

19
creative energies."

Of course, it is unreasonable to imagine that there are not some "discipline problems" in a Montessori environment. When a child acts in a discourteous or rough manner, he is treated as if he were ill. He is isolated from his fellows, given the most coveted toys and equipment, petted, and treated with solicitude and concern. He is given everything he wishes except the company of his classmates. When he has calmed down, he is allowed to return to ordinary activities.

Treatment of the unruly or disruptive child as one who is ill has great merit. Actually a child who is misbehaving is probably ill — at least emotionally upset. His nervous condition may be the result of fatigue, overstimulation, anxiety of some sort or other. At any rate quiet, considerate treatment will usually come closer to a cure than scolding or anger on the part of the teacher. In an atmosphere of independent self-discipline there is certainly no place for stars or awards for good behavior; these practices smack of unreality. Maria Montessori relates numerous examples of children who were too busy and interested in their work to bother about preferred rewards.

Considering education to be living rather than a preparation for life, Montessori paid particular attention to the practical aspects of life or what she called the "exercises of the practical

life." These exercises include cleanliness and order both with respect to the person and to the classroom. In the Casa dei Bambini, Montessori directed that the day begin with personal inspection by the directress -- whenever possible in the presence of the mother who has accompanied her child to school. Hair, skin, nails, and clothing were inspected. Attention was called to uncleanness or sloppy clothing. As far as the author knows, this practice is not continued in local Montessori schools.

Montessori expected the children to take complete charge of the cleanliness and order in the classroom. They are to inspect the room each morning cleaning and setting things in order where necessary. Mops, pails, brooms, and dustpans are available. The directress shows the child how to use these materials correctly. Each child cleans his own table every morning. Younger children especially enjoy sweeping, mopping, and cleaning even after regular morning inspection is over.

"Under the heading 'Care of Environment' we would include such occupations as: sweeping the floor, dusting the furniture, scrubbing tables and chairs, washing and ironing clothes, polishing door handles, arranging flowers, watering plants, tidying out cupboards, laying tables for meals, waiting at table, washing up afterwards; and a great many more similar occupations. To these we may add such jobs as peeling potatoes, shelling peas, preparing sandwiches; and also many outdoor tasks, such as digging, planting,

weeding, watering, sweeping up leaves and so forth."

Other exercises of the practical life involve learning to manipulate various types of fasteners. Skill in using zippers, buttons, hooks, and snaps is important from two points of view. Such activities help to establish muscle control. Also, the child who can dress and undress himself is freed from the need for help. An important aspect of the Montessori philosophy is the attempt to make the child as independent as possible.

It is important to realize that the exercises of the practical life are real. The table is laid for a real meal; the silver to be polished is really tarnished. Tea parties with dolls have no place in the Montessori thinking. The child does not think of his activity as play; he is working and he wants to see results. Therefore, irons really do heat up, and mops and other equipment can be and are used.

While it is important for all children to be able to carry out the exercises of the practical life for the sake of doing useful things, this is not Montessori's chief motivation in urging the practices. Rather, there is or seems to be a real need for children aged three to five to practice these skills. Often they get in the way of their mothers trying to houseclean. But in the prepared environment the child is able to carry out these activities perfectly. There is plenty of time; the equipment (brooms,

mops, etc.) are the right size for his use. Whether the child is ever called upon to sweep a floor as he grows older is irrelevant. The point is that he has a real need to do so and to do it well as part of his development.

Plants and gardening are considered part of the exercises of the practical life. In an ideal situation a Montessori school would have a rather large garden wherein each child would plant seeds and bulbs and tend his own rows of flowers and vegetables. Montessori points out the advantages of giving young children an opportunity to work in a garden or at least to tend plants in a classroom: the child is initiated into observation; he learns foresight by way of auto-education; he learns the virtue of patience; and he is inspired with a feeling for nature.

Related closely to the exercises of the practical life are the exercises of grace and courtesy. As a part of carrying out the exercises of the practical life, the child learns to do these tasks perfectly, with grace and courtesy. He learns to move a chair quietly, to walk without bumping into things, to avoid dropping or spilling things, to speak politely to his classmates.

These exercises — both of the practical life and of courtesy and grace — are given with lasting results only during the periods of sensitivity for order and for perfecting muscular coordination.

Following what she believed to be the natural physiological and psychical development of the child, Montessori divided her

technique into three parts: motor education, sensory education, and language. "Montessori designed the 'didactic apparatus' . . . as a means to the achievement of . . . sensory, motor, and intellectual development through the free exercise of the child's interest. Much of it she derived from her French medical predecessor, Edouard Séguin. Despite the attention focused upon it by both admirers and disciples, the apparatus remains dependent for its effectiveness on Montessori's vision of the total environment in which learning occurs."²¹

As the child uses the various pieces of apparatus, he develops an ability to differentiate size, weight, color, form, texture, sounds, odors, and tastes. In short, all his senses are trained and exercised. "It may be equally useful to state the aim of our sense training. There is the obvious value of the training and refinement of the senses which, by widening the field of perception, furnish an ever more solid and richer basis to the development of the intelligence. It is through contact with and exploration of the environment that the intelligence builds up its store of operational ideas without which its abstract functioning lacks both foundation and precision, exactitude and inspiration. This contact is established by means of the senses and of movement."²²

²¹

Rambusch, "Introduction," pp. 12-13.

²²Montessori, Discovery, pp. 143-144.

"There seems little doubt that a child who has many opportunities to touch, smell, hear, and see, to manipulate and enjoy all the forms of sensory exploration of his environment has a better chance to develop in every way than one less fortunate. Empirical studies show that the importance of sensory motor activity and the manipulation of concrete objects have been demonstrated beyond dispute. This is particularly true in the case of perception development."²³

A brief description of the material will probably clarify not only the means but the purposes of their use. The first apparatus, used by two-and-a-half or three-year-olds, is composed of three solid pieces of wood, in each of which is inserted a row of ten small cylinders. In the first set the cylinders decrease in diameter only; in the second set they decrease in diameter and height; and in the third set they decrease in height only. "The exercise consists in taking out the cylinders, mixing them and putting them back in the right place. It is performed by the child as he sits in a comfortable position at a little table. He exercises his hands in the delicate act of taking hold of the button with tips of one or two fingers, and in the little movements of the hand and arm as he mixes the cylinders, without

23

Aubert J. Clark, O. F. M., "Evaluation of Montessori Postulates in the Light of Empirical Research," Catholic Educational Review, LXI (January, 1963), 13.

letting them fall and without making too much noise and puts them back again each in its own place."²⁴ This material is designed to educate the eye to distinguish difference in dimension. "The aim is an inner one, namely, that the child train himself to observe; that he be led to make comparisons between objects, to form judgments, to reason and to decide; and it is in the indefinite repetition of this exercise of attention and of intelligence that a real development ensues."²⁵

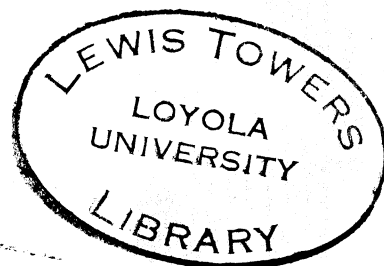
The series of objects to follow the cylinders consists of three sets of geometric solid forms: ten wooden cubes colored pink diminishing in size from ten to one centimeter (the pink tower), ten brown wooden prisms twenty centimeters long and ranging from ten centimeters to one centimeter in height (the broad stair), and ten red and blue rods varying in length from ten centimeters to one meter (the long stair).

"These three sets, the cubes, the prisms, and the rods, cause the child to move about and to handle and carry objects which are difficult for him to grasp with his little hand. Again, by their use, he repeats the training of the eye to the recognition of differences in size between similar objects."²⁶

²⁴ Montessorin Handbook, p. 66.

²⁵ Ibid., p. 71.

²⁶ Ibid., p. 76.



The tactile sense is developed through the use of two types of apparatus: rectangular boards with alternating smooth and rough surfaces over which the child runs his fingers and a collection of various pieces of cloth which the child learns to touch carefully and identify (in later stages while blindfolded) as feeling like silk, velvet, wool, linen, and so on.

What Montessori calls the "baric" sense is developed through the use of a group of small wooden tablets of different weights. Blindfolded, the child sorts the tablets, putting the heavier ones to one side and the lighter ones to the other.

Identification of colors is developed by use of a set of two separate boxes each containing sixty-four colored tablets. The first exercise consists in matching the colors; later the child learns to name the colors; still later he arranges them according to shades.

A chest of drawers containing plane insets is a very much used part of the apparatus. Each drawer contains six different metal insets which may be lifted up by little knobs. At first these insets are removed and replaced as in a puzzle. Later they are used like stencils for tracing. The first use aims at training the eye to differentiate flat shapes. The second exercise trains the muscles of the hand and is a preparation for writing.

A collection of cylindrical closed boxes which are shaken gently and a double series of musical bells are used in training the sense of hearing. An exercise associated with auditory

development is the "silence game"; it is also used for its disciplinary effects. At a signal from the teacher all of the children stop whatever they are doing and sit as still and silently as possible. After several moments of such silence the teacher or one of the children begin to call in a whisper the children's names. As each child hears his name he walks very quietly to the part of the room where the caller is stationed. Little children seem to enjoy this game. Its value in encouraging the practice of self-control is probably as great as its importance for auditory discrimination.

"It is necessary to begin the education of the senses in the formative period, if we wish to perfect this sense development with the education which is to follow. The education of the senses should be begun methodically in infancy and should continue during the entire period of instruction which is to prepare the individual for life in society."²⁷

Much of the excitement generated by the original Casa dei Bambini in Rome concerned the "explosion" of writing; four-year-olds who could not yet read began writing words and sentences. "They wrote everywhere — on doors, walls, and even at home on loaves of bread. They were about four years old. The power of writing appeared as an unexpected event. The teacher would tell

²⁷Montessori, Method, p. 221.

me, for instance, 'This child began to write yesterday at 3 P.M.'²⁸
 Of course, this sudden display of ability was no miracle. The children had been prepared for writing by use of various materials. As contemporary, and not really sympathetic, observer pointed out: "The results of the method recorded by Dr. Montessori are certainly astonishing. In the case of four-year-old children the average time that elapses between the first trial of the preparatory exercises and the first written word is from a month to six weeks. With children of five the period is shorter. As for execution, the children write well from the first. The form of the letters is surprisingly like that of the sandpaper models. The ordinary writing of even older children in the schools of any country compare unfavorably with that of Montessori's pupils."²⁹

Sandpaper boards and metal insets, both materials used to further sensory development, are part of the preparation for writing. Sandpaper letters are carefully fingered by the child to familiarize him with the alphabet. A set of cut-out letters is used to make words. Thus, even before his muscular development is such as to enable him to write the child can construct words with the movable alphabet. Construction of words and writing precede reading in the Montessori method. The highly phonetic nature of

²⁸

28 Maria Montessori, The Secret of Childhood (Bombay, 1936), p. 150.

²⁹

29 William Boyd, From Locke to Montessori (New York, 1914) p. 175.

the Italian language is, of course, a great help in the entirely phonetic reading approach advocated by Montessori. "At Yale, Dr. O. K. Moore has for many years been doing extensive research in how to teach preschool children to read. Dr. Moore believes that it is easier to teach a three-year-old to read than a four-year-old, a four-year-old than a five-year-old and a five-year-old than a six-year-old."³⁰

"Arithmetic materials include the use of colored rods to make more concrete the child's exploration with numerical abstractions . . . and the use of discovery-learning procedures, which very often sound like the 'new math' techniques coming to fore of late."³¹ Montessori herself confessed to feeling that perhaps very young children should not be taught mathematics. She was forced to change her mind as a result of her experiences with a group of four-and five-year-olds who had learned the numbers one through ten and the meaning of zero. They seemed totally uninterested in learning what Montessori thought should logically follow — eleven, twelve, and thirteen. However, by chance these little children get hold of the Decimal System apparatus, consisting "in loose beads, bead bars of ten, squares made with ten ten-bead bars

³⁰

Glenn Doman, How to Teach Your Baby to Read (New York, 1964), p. 67.

³¹

Terry Denny, "Montessori Resurrected: Now What?" Educational Forum, XXIX (May, 1965), 440.

and cubes made with ten squares. Together with them cards . . . one to nine, ten to ninety, etc. written on them, the cards being of different length so that the significant figures can fall on their proper place when superimposed.³² They worked with the apparatus learning how to add, subtract, multiply, and divide very large numbers. "With the clear knowledge they had gained of the numbers up to ten the children had got hold of a key which³³ allowed them to explore the decimal system."

Indeed, the experience of Montessori as well as some of those involved in teaching the "new math" indicate that "The abstract nature of math need not represent the almost insuperable obstacle that most teachers consider it to be. Nor should the tender age of the child be considered as immature to deal with such abstractions, if they are presented in a manner suitable to the child's potentialities."³⁴

In this appraisal of those aspects of Maria Montessori's theories which seem pertinent to current prekindergartens and kindergartens, Dr. Montessori's view of the child, of his freedom, and of the role of the teacher were stressed as background to the discussion of Montessori materials and their use. Summarily,

³²

Mario M. Montessori, "Maria Montessori's Contribution to the Cultivation of the Mathematical Mind," International Review of Education, VII (1961), 137.

³³

Ibid., p. 140.

³⁴

Ibid.

emphasis must be put on liberty for the child and on individual instruction. There is a wide span of sophistication and complexity of Montessori materials — from brooms and mops to the decimal system apparatus. And there is usually a great difference in age, ability, and experiential background among the children. Such a range in materials is necessary to allow for matching the child's abilities and needs with appropriate educational experiences. But such matching will be impossible unless the teacher allows the child to lead, to show by his interests what are his abilities and needs. Of course, the child does not usually just wander around and pick up what is appropriate. Here is the real challenge to the teacher: understanding the sequence of materials and the stages of child development in general, she observes each child and has ready significant experiences at the proper moment. "When she feels herself, aflame with interest, 'seeing' the spiritual phenomena of the child, and experiences a serene joy and an insatiable eagerness in observing them, then she will know that she is 'initiated.' Then she will begin to become a teacher."³⁵

35

35
Maria Montessori, Spontaneous Activity in Education (New York, 1917), pp. 140-141.

CHAPTER III

A SURVEY OF SELECTED KINDERGARTENS AND PREKINDERGARTENS

Before suggesting a program of applying Montessori's theories to current urban kindergartens and prekindergartens, it should be worthwhile to appraise contemporary classroom practices in light of Montessori's philosophy, to note the extent of application of her theories, and to point up areas of disagreement with regard to Montessori practice and philosophy. Montessori's dictum regarding the importance of observation, if extended to this project, will help to prevent repetitious and contradictory suggestions.

In carrying out the survey, more or less informal methods of observation and interview were used. Points which were considered were the following: appearance of the classroom, equipment, extent of individual and group activity, role of the teacher, discipline, teachers' knowledge and opinion of Montessori method as indicated in conversation. Appendix I is a list of the schools visited; the checklist used in the survey appears as Appendix II.

Thirty-five classroom situations were observed; of these more than half were kindergartens. Four of the kindergartens were Catholic schools; the remainder were public supported. Of the thirty-five classrooms visited, six were located in suburbs, six-

teen in the inner city, and the others in outlying areas of the city. In so far as possible, schools (and teachers) enjoying a reputation for successful and creative teaching were selected. No teacher interviewed was considered by her principal as less than excellent in her classroom performance.

Tabulating or enumerating the findings would most likely be tiresome and unrewarding. Rather, a summary of impressions, a comparison of these impressions with observations of Montessori practices, and an interpretation of observational findings will be presented.

The following summary is hopefully an accurate appraisal of contemporary kindergartens and prekindergartens in the Chicago area from the point of view of classroom appearance, equipment, practices, and teachers' attitudes.

So far as classroom appearances were concerned thirty of the rooms were very cheerful and colorful, if somewhat cluttered, with copious displays, bulletin boards, and evidence of children's work. The other five were very pleasant, but lacked current bulletin boards and/or displays.

In only two of the classrooms the children were seated at individual tables; in the others tables of four, six, and eight were used. Twenty-one rooms had pianos, record players, and movie projectors at their disposal. One room had all its own audio-visual equipment. Large play equipment, such as slides, sand tables, playhouses, were available in twenty-seven cases. Blocks

were universally present; yet in three cases they were locked away in a cabinet. Cars, trucks, dolls, and doll buggies were found in every classroom.

There was a surprising scarcity of puzzles and other manipulative materials in many classrooms. Fifteen classrooms had fewer than five puzzles. The other twenty had a more impressive total although they were not readily available to the children. Other manipulative devices were in short supply in twenty classrooms and non-existent in five. Only one classroom had, within easy reach, a large number of puzzles, peg sets, manipulative games, and fastening devices. Two classrooms had real tools — saws, hammers, drills; the others had none at all.

Materials for art work were abundantly available in thirty-two classes. In three classrooms no paint or clay was used. Only five classrooms had more than two double easles. At least some materials for musical expression were universally available.

In two classrooms fish, many plants, birds — in one case a dog — contributed opportunity for nature study. No class had a real garden area at its disposal. Five classes lacked any plant or animal.

Storage facilities in five schools were quite inadequate. In twenty-eight facilities were adequate but in high, locked cabinets or separate. Only two rooms were equipped with many low, open shelves for storage of books and materials. In nine rooms space was available to each child to store his possessions

and unfinished projects, as well as to hang his outdoor garments.

Books were available in every room. However, the supply was quite small in six rooms, and three rooms had books on high shelves where children could not reach them. Twenty classrooms had at least one globe; the remaining fifteen none. Magnetic and wood puzzle maps were found in only one classroom.

Group activities were the rule in thirty-four classrooms. In one classroom some time, although not too much, was allowed for individual instruction and work. Child-initiated-and-directed activities were observed in only one classroom. Activities were arranged in sequential manner in all classrooms. Directed instruction in reading took place in six classrooms; reading readiness programs were followed in twenty-nine. Directed instruction in the new math was observed in fifteen classrooms (almost universally using SRA material). Play was thought to be the most important element in all classrooms -- or at least the pretense of play, "All our work is such fun; it's play."

No classroom offered an opportunity for exercises of the practical life, although the children were expected to clean up after themselves.

Time schedules in all but one class called for many short periods of activity.

The role of the teacher as director, leader, and center of attention was universal. In twenty-five cases she assumed a motherly or grandmotherly attitude. In all cases she was a

friendly and smiling person. Discipline was good in all cases. Ten teachers seemed to be quite strict; the remainder were more free, but with control.

Only two teachers were not aware of Maria Montessori. Four had rather vague ideas. The others had read articles or visited a Montessori school. One very experienced teacher was attempting to implement Montessori ideas in her suburban kindergarten. Another indicated that her work with Project Head Start caused her to feel that some aspects of Montessori's theories would be useful with slum children. Seven showed interest and willingness to try out new ideas if only "someone would tell us how." Twenty expressed varying degrees of hostility or suspicion towards the Montessori method.

Comparison of these findings with Montessori practice give rise to the following comments. More colorful and busy-looking than the traditional Montessori classrooms, all classes featured more pictures, greater display of children's work, and more bulletin boards. While the rooms seemed more cheerful and child-centered, one missed the orderly appearance of the typical Montessori classroom with its long shelves and uncluttered arrangement of materials. Generally speaking, the more colorful, brighter classrooms seemed more exciting, but far less serene than Montessori classrooms.

An element in the appearance of classrooms is the equipment found there. Tables seating six or eight were usual; in Montes-

sori classrooms each child has his own table. Most of the materials found in kindergartens was very colorful. For the most part Montessori equipment is attractively made of wood. However, there are few bright colors. In the prekindergartens the observer found much play equipment. In some cases (generally considered to be the more fortunate) very large toys such as slides, sand tables, tricycles, doll buggies, tents, and playhouses were in evidence. Most classrooms seemed to have sufficient storage space, but much of it was in closets or cabinets with doors — available only to teachers.

The attitude and atmosphere in the classrooms seemed to be one of joy and happiness; work was seldom mentioned. Although none would express it in so flowery a manner, there seemed to be general agreement with Froebel, "Play is the purest, most spiritual activity of man at this stage, and, at the same time, typical of human life as a whole — of the inner hidden natural life in man and all things."¹

In only one case was there any evidence of real individual work — except perhaps during the free play periods. Six kindergartens were doing beginning reading, and fifteen were involved in rather formal instruction in new math, but in all cases the instruction was a group activity. In most cases the groups were very

¹
Friedrich Froebel, The Education of Man (New York, 1898), pp. 54-55.

large — often the entire class. In craft and art work instruction was normally given to the entire group; then the teacher and her aids (in the case of the prekindergartens) moved about to help children individually. Musical activities — singing, dancing, and rhythm bands — were all group activities. These observations would concur with those of Miss Stendler, "In today's preschools there is considerable emphasis upon whole group activity; all the children together engage in rhythms, singing, listening to records or stories, having 'show and tell,' and there is less time when the child works on his own."²

In all cases the teacher was the center of attention; it seemed apparent that she directed all the activities. While the Montessori directress is expected to observe and prepare, these teachers led and performed as well. Considered to be superior teachers, all of the women observed were charming, gay, and spirited with their charges. Enthusiasm for their work and affection for their children were apparent.

There were no discipline problems in the classes observed; the children seemed to be quite under control. Many of the teachers seemed rather permissive and allowed chatter by the children so long as it was not too loud. But in most cases the children were very quiet, walking quietly in the halls to the

²

Cecilia Stendler, "Montessori Method," Educational Forum, XXIX (May, 1965), 431.

gym or assembly hall, listening silently to group instructions, speaking softly to their classmates while engaged in work or play at the table or the doll corner. However, such discipline was clearly imposed by the teacher and enforced by her correction—calling a child's name, clearing her throat, moving about the room. Apparently the children acted so as to win their teacher's approval. Whether there was any purposeful self-discipline was uncertain.

Most of the teachers interviewed seemed to have at least a nodding acquaintance with Montessori. Being alert and informed people they had read several articles on the subject appearing in the popular press. Several had observed Montessori schools. One teacher has integrated some Montessori ideas in her classroom. Another teacher expressed a desire to try out some of the Montessori ideas she had observed, but she wondered how to fit them into her program and classroom. Several others attacked Montessori ideas as faddish, snob-values, as too slow-paced for the children, and too good to be true in so far as independent work and self-discipline were concerned. One confessed to feeling insecure except when working with a group. She voiced what may have been a concern of many others when she said she feared losing control of the children if they were to be allowed freedom to work individually. Some felt the Montessori approach was too formal and cold; several suggested that disadvantaged children especially required more mothering than the typical Montessori

teacher provides.

The survey, informal as it was, indicated an awareness of Montessori on the part of the teachers. But little adaptation of the philosophy or method can be found. Many applications seem to be the result of toy manufacturers' adapting materials developed by Montessori; in all cases these self-correcting materials—puzzles, blocks, and so on—are more colorful and appealing than the Montessori originals.

Montessori disciples claim that the Dottoressa was responsible for the introduction of child-size furniture. If this is true, then, of course, she must be credited with great influence in the modern classroom where nearly all the furniture is child-size. Since use of such equipment is universal now, discussion of Montessori influence is academic here.

Analyzing the findings of the survey in terms of Montessori's philosophy, one begins to suspect that little consideration is given to the child's need for order. While it will be admitted that the classrooms were without exception neat and orderly and the children responsible for putting away materials and equipment to some extent, the very quantity of materials in addition in most cases to the situation of storage facilities made it impossible for the children to pick and choose among the equipment or to return to apparatus a second day or after a break.

Most of the exercises of the practical life that were carried out was not "real." While toy dishes, irons and ironing boards,

doll corners, trucks and cars were available, no sweeping, table-setting, preparation of food, or serving of refreshments were observed. Sensory training was not a real part of the program. A formal, graded plan for sensory education is part of the Montessori approach, whereas the kindergartens and prekindergartens provided such experience in an informal, incidental manner. The emphasis and tone in the classrooms observed seemed to be on play rather than work although there were exceptions—especially when the formal teaching of reading and arithmetic was part of the program. Parenthetically, it might be pointed out that where reading was being taught in kindergarten the sight method was used almost exclusively. This is in contrast to the Montessori emphasis on the phonetic method.

Probably the most significant difference between the classrooms observed and the Montessori method is the emphasis on group rather than individual activity. Since the Montessori approach stresses the individual so strongly, this difference cannot be ignored.

The survey pointed up two aspects of the traditional kindergarten and nursery school program which may prove to be stumbling blocks in setting up a Montessori-inspired program. They are the emphasis on group instruction and activity and the idea of the role of the teacher. Coupled with the concept of freedom, these elements are at the heart of the Montessori theory. In addition, the attitudes of the teachers interviewed towards Montessori ideas

are essentially negative. Suspicion will no doubt be allayed by further reading and study. Yet Montessori's own disciples are the real enemies here in their insistence on "pure" Montessori, in their continual downgrading of traditional education, and in their tendency to overemphasize the successes of the Montessori approach.

CHAPTER IV

APPLICATION OF MONTESSORI'S PHILOSOPHY TO CONTEMPORARY URBAN KINDERGARTENS AND PREKINDERGARTENS

Some aspects of Maria Montessori's philosophy and practice seem most appropriate to contemporary urban kindergartens and prekindergartens. Remembering that Montessori's first and perhaps greatest success occurred in the San Lorenzo slum quarter of Rome, an area as bad or worse than any of our slums today, one is encouraged to hope for just such success again.

In a paper delivered at the Arden House Conference on Pre-School Enrichment of Socially Disadvantaged Children (December, 1962), Martin Deutsch made the following statement: "Examination of the literature yields no explanation or justification for any child with an intact brain, and who is not severely disturbed, not to learn all the basic scholastic skills. The failure of such children to learn is the failure of the schools to develop curricula consistent with the environmental experience of the children and their subsequent initial abilities and disabilities."

¹
Martin Deutsch, "Facilitating Development in the Pre-School Child: Social and Psychological Perspectives," Pre-School Education Today, ed. Fred M. Hechinger (New York, 1966), pp. 86-87.

The children with whom urban kindergartens and prekindergartens will be dealing come to an ever-increasing degree from the lowest social and economic classes. "Altogether, these groups make up about 15% of the United States population. Since they tend to have large families, their children make up as much as 20% of the child population."² In fact, "Most writers agree that one out of every three children in America's big cities is 'disadvantaged' or 'culturally deprived.' If current socio-economic trends and the present rate of population growth continue, this ratio will reach one out of two in the large cities by 1970." Therefore, it may be worthwhile to examine briefly the characteristics of the slum child, his school, and his environment. If, as Dr. Deutsch suggests, the blame for school failure and the appalling numbers of drop-outs lies with the school's failure to consider the environment carefully and adapt methods and curricula to it, the following appraisal of the early years in a slum home may be revealing.

"One of the important features of lower class life in poverty is crowding. Many persons live in little space. Crowding, however, may be no handicap for a human infant during most of the

2

Robert J. Havighurst, "Who Are the Disadvantages?" Education LXXXV (April, 1965), 457.

3

Stanley Krippner, "Materials and Methods in Learning: the Montessori Approach," Education, LXXXV (April, 1965), 467.

first year of life. Although there is no certainty of this, it is conceivable that being a young infant among a large number of people living within a room may actually serve to provide such wide variations of visual and auditory inputs that it will facilitate development more than will the condition typical of the actually privileged ⁴ during most of the first year." But it is in the second year that the slum child starts to experience difficulties in his environment. "As the child begins to throw things and as he begins to develop his own methods of locomotion, he is likely to find himself in the way of adults already made ill-tempered by their own discomforts and by the fact that they are getting in each other's way. . . . The activities in which the child must indulge for the development of his own interests and skills must almost inevitably be sharply ⁵ curbed."

When the child, during the last part of the second year and all of the third, is beginning to learn to talk, he is severely limited. "The variety of linguistic patterns available for imitation in the models provided by lower class adults is both highly limited and wrong for the standards of later schooling. Furthermore, when the infant has developed a number of pseudowords and has achieved the 'learning set' that 'things have names' and

⁴

J. McV. Hunt, "The Psychological Bases for Using Pre-School Enrichment as an Antidote for Cultural Deprivation," in Hechinger, pp. 55-56.

⁵

Ibid.

begins asking 'what's that?' he is all too unlikely to get answers. Or, the answers he gets are all too likely to be so punishing that they inhibit such questioning."⁶

A psychologist at the University of Illinois, Dr. Hunt acknowledges a debt to the Swiss psychologist Jean Piaget, who pioneered in the development of intelligence. Dr. Hunt summarizes the effects of the slum environment on the child as follows: "The infant developing in the crowded circumstances of lower class poverty may develop well enough through the first year, begin to show retardation during the second year, and show even more retardation during the third, fourth, and fifth years. Presumably, that retardation which occurs during the second year and even that during the third year, can probably be reversed to a considerable degree by supplying proper circumstances in either a nursery school or a day-care center for children of four and five — but I suspect it would be preferable to start with children at three years of age."⁷

"Children reflect the strengths, needs, and attitudes of their environment. Surroundings permeated by varied forms of deprivation may cause children to develop low self-esteem, limited or faulty concepts, poor skills for communication, limited visual or

⁶

Ibid.

⁷⁷

Ibid.

auditory perception, a negative attitude toward school and learning, and little appreciation for the tools of academic learning." ⁸ A description of a crowded slum home would be incomplete without mention of values. The slum child is not taught that school is important. Books and newspapers are practically non-existent in his home. The only real transmitter of mass culture, the school culture, is television. And unfortunately the disadvantaged child soon learns not to listen, not to attend. As a matter of self-defense he must shut out the noise and violence of the environment. In so doing he shuts out some of the intellectual stimulation and forms himself in a habit of not listening. "Then, when they come to school, their school performance suffered because they had not learned to 'listen' to the teacher and other important people or to 'see' the things they are shown in the school." ⁹ Often what he hears from his teacher is meaningless to him; he is not ready to cope with her vocabulary, with the speed with which she speaks. At times, too, unfortunately, he is too busy detecting her prejudice towards him because of his race or social class or both.

The values of a slum home are surely not intellectual. However, there are certain positive values — loyalty and responsi-

⁸

Catherine Brunner, "Deprivation — Its Effects, Its Remedies" Educational Leadership, XXIII (November, 1965), 105.

⁹

Havighurst, p456.

bility are paramount. The child is loyal to his siblings, his uncles, aunts, his block; he also takes on responsibility for himself and for the safety of younger brothers and sisters. He is more or less secure emotionally. "The home is a crowded, busy, active place where no one child is focused upon. There are too many children for this, and the parents have too little time. Consequently, the children spend much more time in each other's company and with relatives. Individualism and self-concern on the part of the children is much less likely to emerge and is, in fact, discouraged in the more family-centered home."¹⁰

So, ill-prepared to face the world, the slum child arrives at a school which is often old and ill-equipped. He will find teachers who are frightened, indifferent, unprepared, inexperienced, sometimes even lazy and prejudiced. At the very best his young teacher will be uncertain, overwhelmed by the bureaucratic and bookkeeping aspects of her job and about to leave for greener (usually really whiter) pastures. The books he finds picture families, children, and homes very unlike his. He will be expected to read words he has never had occasion to use in his life; he will be expected to be interested in a story about an organ grinder and his monkey — he who has seen men kill one another in gang fights. His teachers will not be able to under-

¹⁰

Frank Riessman, The Culturally Deprived Child (New York, 1962), p. 37.

stand his disinterest in learning to read, in competing for silly prizes, in being "good." He will be thought insolent when his confusion causes him to retire into a shell of silence. But at the end of the term this child of the slums with his lower class values, interests, and ideas who has suffered through a succession of poorly-trained, indifferent substitutes lacking sufficient books and materials, will be expected to "come up to grade level."

In brief, "the lower class child . . . experiences the middle-class oriented school as discontinuous with his home environment, and, further, comes to it unprepared in the basic skills on which the curriculum is founded. The school becomes a place which makes puzzling demands and where failure is frequent and feelings of competence are subsequently not generated. Motivation decreases, and the school loses its effectiveness." ¹¹

Surely with Doctors Hunt and Deutsch and the other delegates to the Arden House Conference, with President Johnson and the members of Congress who enacted the Anti-Poverty Act and the Head Start Program, with all thinking Americans, we must hope and work that the pattern of failure and drop-out among urban children be reversed. Compensatory education has been hailed as the miracle worker. And indeed it may well be if it is an effective, unified program. But we must agree with Dr. Deutsch that "There is tremendous pressure to set up programs without adequate preparation

and training of teachers and without a well developed curriculum." ¹²

It is the ultimate purpose of this paper to heed Dr. Deutsch and his warning to take time for study and planning a curriculum and to set up some guidelines for teacher preparation.

"The Montessori approach may be particularly relevant to our own time, and for all children, for a number of reasons. It emphasized what psychologists call intrinsic motivation, i.e., harnessing the child's innate curiosity and delight in discovery. Each child is free to examine and work with whatever interests him, for as long as it interests him, from the materials that are available. What is available is determined by the Montessori concept of the 'prepared environment,' which places great stress on training the sensory processes: cognition is enhanced by providing appropriate stimuli to all the senses: touch, smell, taste, ¹³ as well as sight and hearing."

The emphasis on the individual so sorely lacking in slum living is a most important aspect of Montessori's philosophy. With stress on the individual, the child will begin to develop self-confidence in school tasks especially since the materials he will be using will be self-correcting, stimulating, and satis-

¹²

Fred M. Hechinger, "Passport to Equality," in Hechinger, p. 10.

¹³

Silberman, p. 281.

fyng. His improved self-image will encourage him to attack subsequent tasks with confidence. "It must be understood that in any neighborhood there is a wide range of family living patterns, standards, and aspirations. All persons do not react in exactly the same manner to any situation, and different kinds of relationships create differences in the developmental patterns of individuals. Therefore, it is important that any educational program provide for individualized attention to strengths, needs, and content."¹⁴

Montessori's demand for freedom for the child — freedom in which to choose tasks which interest him and which meet his needs — is most important in satisfying what Dr. Hunt calls the problem of match. "Perhaps the chief advantage of Montessori's method lies in the fact that it gives the individual child an opportunity to find the circumstances which match his own particular interests and stage of development. This carries with it the corollary advantage of making learning fun."¹⁵ Such freedom will help the child to develop self-discipline and habits of concentration and attention. Indeed, Montessori may seem to answer two of the great needs of prekindergarten and kindergarten programs for culturally deprived children. There must be a "delicate balance between order and freedom — the order of a

14

Brunner, p. 105.

15

Hunt, p. 60.

steady routine lacking in the slum home and the freedom to explore, ask questions, and expect answers from adults, so important a part of middle-class child-rearing.¹⁶"

The question of freedom is an interesting one to take up with respect to disadvantaged children. Surely Maria Montessori was right in prescribing freedom as indispensable to learning. But what of the slum child's concept of freedom? In one sense he has very little liberty — he must be quiet while father is sleeping, he must not touch a crabby neighbor's fence, he must watch the baby, he must dress himself and take care of his toilet needs without being reminded. But from another point of view, he has much more freedom than a middle-class child. He is not questioned about how he spends his time outdoors so long as he does not get into trouble. No one is interested in what he and his pals talk about. No responsible adult has the time or inclination to question him once he is able to get around by himself. So, if the slum child is forced into group activity he may be shy and retiring.

"The contribution of self-chosen and self-directed activities to intrinsic motivation; the need for intellectually stimulating and self-correcting equipment that a child can use individually; the potential contribution of a good nursery school program to

16

Hechinger, p. 10.

the intellectual growth of the culturally deprived; the need to match activities to specific deficiencies — these are the rewarding ideas from Montessori that can be put to good use today.”¹⁷

The exercises of the practical life are so important as to seem self-evident. Yet overly sympathetic and sentimental observers may take the tack that since the lot of the deprived child is so hard anyway he should not be made to do servile work but must be allowed to play. Such criticism must be ignored. Because of large families, limited space, busy schedule of the mother, deprived children often lack experience in dusting, sweeping, polishing, preparing food or serving it. An oldest child is called upon to take such responsibility, but there is seldom inclination or time to teach younger ones to do household tasks. In almost all cases the work is done in a hurried, slipshod manner. The point here is not to criticize house-keeping procedures. But it is important for the intellectual as well as motor development of the pre-schooler that he experience the joy and sense of accomplishment in a well-swept floor, perfectly polished shoes, a meal served without a spill.

The disadvantaged child most often dresses and undresses himself. Still, use of buttoning and fastening frames is impor-

¹⁷

Cecilia Stendler, "Montessori Method," Educational Forum, (May, 1965), 435. X

tant. Witness the numbers of children who arrive at school dressed but unbuttoned.

The gardening aspects of the practical life exercises are especially important in an area where one finds so few lawns, trees, and other greenery. Development of feelings of respect for life, of patience, of planning, of careful day-by-day attention which result from work with plants are at least as important but perhaps more so, than the scientific knowledge about botony which may be learned.

The materials used for sensory and intellectual development need not be exactly those prescribed by Dr. Montessori. However, her lead should be followed in using self-correcting materials. Those for developing color discrimination, sounds, weights, and sizes are important beginnings. "The use of sense-stimulating materials (blocks, bells, sandpaper letters) and step by step activities (tying knots, constructing towers, preparing food) provide for perceptual and cognitive growth in ways not possible in the dreary slum environment."¹⁸

Since the crowded slum apartment does not allow either the space or the freedom from interruption necessary for working with the pink tower, the long and broad stairs, these materials or their equivalent are especially important. Use of puzzles and the plain geometric insets will provide a basis for later tracing

and beginning of writing as well as providing training in visual discrimination so essential for early reading experiences.

Extensive experience with the rough and smooth textured boards, sandpaper letters, and the cut-out alphabet is especially important for the child who has no books or newspapers at home, who seldom is given pencil, paper, or crayons to work with at home. Cut-out numbers, number frames, the modern abacus, sticks and other material for counting and beads for teaching the decimal system can be manipulated by the child.

Language difficulties and lacks suffered by the child from a culturally deprived home will, of course, be worked on. However, the Montessori emphasis on the passive role of the teacher — the teacher who shows rather than tells — is most significant for the slum child, who is so often confused by the diction, vocabulary and speed of middle-class language. Also, the teacher who is like "an elder sibling, watching disinterestedly, insuring safety and opportunity of functioning,"¹⁹ rather than a substitute mother is more readily accepted by the child from a slum environment. He is not accustomed to the petting, pestering, and solicitude the middle-class child receives from mother and teacher alike. Thus, he finds the over-zealous, concerned teacher an object of suspicion. The frequent questioning, her demands that he perform, her concern for his happiness make him uneasy and often cause him

¹⁹Rambusch, Handbook, p. 17.

to retreat. "And Montessori is, above all, a world in which the child's educational development is not controlled by a personal relationship with his teacher (the Montessori teacher, in fact, remains aloof, distant, and is definitely not a mother substitute.) Nor is the child's educational development affected by personal relationships with his classmates. . . . It is the child's relationship to the self-teaching, self-correcting materials that is of paramant importance in the education of the Montessori child."²⁰

Let us examine our Montessori-inspired prekindergarten and kindergarten. First of all, there will be no distinction between kindergarten and prekindergarten. One group of thirty to forty children will range in age from three to nearly six. The teacher and her two or three assistants will survey a very large orderly classroom. There will be a table and chair for each child. A small locker or cubicle will be provided for each child to store his outdoor clothes and a private drawer for his other possessions. Space along the walls will be available for display of art work. A part of the room will have several sinks with running water; here the equipment involved in the exercises of the practical life will be kept. Other apparatus will be arranged on long low shelves around the room. Although not an element of the Montessori

²⁰

B. J. Millar, "Montessori: The Model for Pre-School Education?" Grade Teacher, LXXXII (March, 1965), 114.

system, there will be a corner devoted to dolls and a few other real toys. Large play equipment will not be found here. Slides, large trucks, stairs and ramps, and other large equipment will be found on the playground or in the gym, not in the classroom.

"Ideally, a preprimary program should be very close to where the children live. It should not necessarily be a physical part of a big schoolhouse, such as a K-8 building. It should be a kind of place where mothers can wander in and out conveniently . the kind of place where mothers and fathers will want to come to learn themselves. It should be open in the evening."²¹

Economically the Montessori method with its somewhat large numbers per class (or per one trained teacher) is a hopeful idea especially when contrasted with most programs of early education which demand very small classes.

Grouping of children of varying ages should be effective in helping children to learn from one another. It should lessen the possibility of competition and provide additional help for the teacher and her aids. Even more significantly, varied age groupings should appeal to the slum child who is accustomed to being with his brothers and sisters and taking care of them. Perhaps such a procedure would help with recruitment of students. Mothers may be less reluctant to allow the three-year-old to go

21

Sidney Marland, "How to Plan for Three and Four Year Olds," Nation's Schools, LXXVI (November, 1965), 45-46.

to school if a five-year-old brother and four-year-old brother are in the same class. Such familial arrangements should not be discouraged at this young age especially among disadvantaged children.

It would be shortsighted to insist that the Montessori approach is the only acceptable method or even that it is a complete program. As we have seen, some aspects of Montessori's philosophy and practice can be applied to contemporary prekindergartens and kindergartens. But it is not the intention of the author to substitute a pure Montessori program for the traditional program. Certain limitations in a Montessori approach will be briefly noted. "A program to provide children with skills in a variety of expressive moods, such as music, art, and language, is totally absent as are opportunities for the development of creativity. . . . Some of the other lacks in the Montessori method stem from historic accident. The system was developed at the turn of the century. Science was absent in all school curricula at that time, so there was no provision made for the teaching of science in the Montessori school. Except for the presence of limited activities in geography and history, the same is true for the social studies. . . . As in other areas of curricula the language arts are very narrowly defined in Montessori schools. The program is entirely skill development."²²

Certain criticisms of Montessori's theories involve aspects of the child's emotional development. "We know that the first years of life are most important years for emotional development. What a child experiences during these years will be decisive for his future development as a personality. One cannot help asking if the strong emphasis on the intellectual training of the Montessori system is done at the cost of emotional well being."²³ In answer, we can quote no less an authority than Sigmund Freud. "If all the world's children were subjected to Montessori educational techniques most of our psychoanalytic couches would be empty."²⁴

Most frequent criticism, however, of a Montessori school is what is termed a failure to provide for socialization. However, Montessori, in answering critics, pointed out "that in her schools a community spirit was fostered by the exercises of the practical life, by training in courtesy, by mixing different ages in ungraded groups, by having the older pupils help the younger, by interesting all in each other's work and by concluding from observation that children tend to turn spontaneously to the companionship of others after a period of individual work."²⁵

²³

Britta Schill, "Montessori System," Childhood Education, XXXIX (December, 1962), 172.

²⁴

Millar, p. 117.

²⁵

Aubert J. Clark, O. F. M., "Montessori and Catholic Principles," Catholic Educational Review, LX (February, 1962), 80.

Such socialization is more realistic than mere dividing into groups for singing and so on.

While Maria Montessori would never have encouraged it, a certain cultishness has grown up among Montessori advocates in this country. One of Montessori's great services to education was her attempt to break the so-called lock-step of education. Yet some of her disciples insist on following slavishly her suggestions regarding the materials themselves and the sequence in which they are to be used. Each day new materials appear which utilize Montessori principles. The work of O. K. Moore with learning machines for young children, while expensive and still experimental, surely should be of interest to anyone concerned as Montessori was with children's working independently in a sequential program of development.

Not only are Montessori enthusiasts often jealous in limiting their materials to the "real" Montessori apparatus; they sometimes deny the possibility of adaptation. Such narrowness is patently foolish and wasteful of Maria Montessori's inspiration. To insist upon teachers who have had no training or experience other than in Montessori schools is to ignore the fact that the first class in the San Lorenzo slum was under the tutelage of an untrained peasant girl.

However, one should be able to appraise the philosophy of Montessori, noting strengths and weaknesses, adapt what is useful and applicable, and discard that which for various reasons, such

as historical accident, is inappropriate to contemporary urban educational systems. Despite all the efforts of dedicated Montessorians, the real influence of the Dottoressa will be felt only when her philosophy becomes a part of the main stream of urban public instructional programs. By the same token, we may agree that "until early education is made respectable in its own right and not merely 'readiness' for the supposedly real education which begins at six, there will be continued waste of human potential and a corresponding need to build into existing programs more remedial than preventive aspects."²⁶

There will be some difficulties in setting up such a program in a traditional urban kindergarten or prekindergarten. These problems will include finding suitable space, recruiting and training teachers, obtaining somewhat unusual materials, and the difficulty of change. But such problems, which shall be dealt with very briefly, are not insurmountable. They so demand of the teacher, administrator, and supervisor courage and patience — courage to defy the status quo and patience to wait for results. And the results should be worth waiting for! There is no reason why Maria Montessori's successes with the children of the Casa dei Bambini in their writing "explosion," in their remarkable courtesy and grace, in their attention and amazing self-discipline,

26

Evelyn Beyer, "Montessori in the Space Age," National Educational Association Journal, LII (December, 1965), 36.

cannot be repeated over and over again. So great will be the joy of all concerned that such success may well provide the spark so badly needed to revitalize elementary school education in deprived areas.

But to our little difficulties. Classroom space in our crowded elementary schools is already posing a problem for Head Start programs. Sidney Marland, Superintendent of Schools in Pittsburg, described the problem, "We're going to use any old space we can get. It may be a church cellar, a YMCA gym, a spare room or two in an existing school, although this is unlikely; it may be a portable that we lug in — it will be any space we can lay our hands on. . . ." ²⁷ The classrooms needed for Montessori-type kindergartens and prekindergartens should be large, at least as large as traditional kindergartens. The room must be equipped with shelves and cupboards. Making arrangements for these physical needs will be difficult but not impossible.

Training of teachers is vital. While the Montessori training program (costing \$1,000 and lasting for a year after the Bachelor's degree) might be helpful, there is no reason why primary teachers or aspirants with some knowledge of child development could not in a two-week work-shop ~~held~~ at district level be made aware of the really essential Montessori principles — freedom, respect for the individuality of the child, passivity of the teacher —

²⁷

Marland, p. 45.

and become familiar with the materials. To begin with, teachers selected for the program should possess a certain serenity, interest in children, and flexibility. Monthly in-service sessions to discuss Montessori principles and daily experiences and problems would be helpful.

Obtaining the official Montessori materials, which are manufactured in Holland, has been difficult and time-consuming. But recently they have become available in Chicago at A. Daigger and Company. In addition, Creative Playthings of New Jersey is manufacturing many satisfactory substitutes. Playskool, Fischer-Price, Judy, and other companies produce many toys which are certainly appropriate. A handyman can make many materials. However, a thorough understanding of the Montessori method and the principles underlying it is essential to selecting and arranging such materials.

No doubt the biggest problem in utilizing Montessori ideas in a traditional preschool program is the reluctance to change. If the Montessori-inspired teacher or principal is convinced, she will be able to convince others of her staff by her enthusiasm. She will be aware of the fears and misconceptions which the survey mentioned earlier showed her teachers to hold about Montessori.

All of the work will be well worth the effort. The Montessori method needs a real exposure, not in the rarified atmosphere of a suburban nursery school, but in what is the real challenge to education today — the inner city. If, as the author hopes,

Montessori-inspired prekindergartens and kindergartens are established in a number of inner city schools and if they are as successful as they could well be, their success will generate enthusiasm on the part of the students, teachers, and the community to improve the quality of education at all levels in poverty areas. Success breeds success. The example of Montessori's work in the slums of Rome should inspire educators to work for a reversal of the pattern of failure. Something of the Montessori mystique — itself a combination of hope, joy, and faith — would do much to bring a better life to those living in today's dreary slums.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

A brief summary of conclusions includes statements regarding the important aspects of Montessori's philosophy as well as the results of the survey and ends with suggestions and recommendations for implementing the theories.

- I. Certain aspects of the philosophy of Maria Montessori can be applied to contemporary urban kindergartens and prekindergartens.
- II. Psychologists have shown that the freedom demanded by Montessori is necessary if the child is to match learning activities to his needs; sociologists have pointed out that all children from the same slum environment do not have the same experiences and abilities.
- III. The role of the teacher, in Montessori's terms, is a passive one; she is observer and a preparer of the environment.
- IV. The discipline stressed in Montessori classes is self-discipline; while children are not allowed to behave in a rude or dangerous manner, they are encouraged to discipline themselves.
- V. The exercises of the practical life satisfy social and

psychological needs of the child as well as developing muscular abilities.

- VI. Sensory education includes practice in manipulating blocks and beads of various sizes and distinguishing various weights, textures, and sounds; such education must be carried out in a sequential manner.
- VII. Education of the intellect is an individual activity; each child must progress at his own rate in his work with numbers, letters, colors.
- VIII. The survey of kindergartens and prekindergartens indicates that pertinent elements of Montessori's philosophy are not utilized currently.

To facilitate the integration of principles of the Montessori method in contemporary urban kindergartens and prekindergartens, the author makes the following recommendations:

1. In setting up a program of prekindergarten and kindergarten, care should be taken in selecting and furnishing the room; it should be very large (at least as large as a conventional kindergarten — preferably larger); there should be low, open shelves all around the room; each child should have his own table and chair as well as a place to hang his coat and to store unfinished projects or work to be brought home; all furniture and equipment should be made from materials which are durable and easy to clean and should be child-sized.

2. A section of the classroom should be set aside for materials used in the exercises of the practical life; several sinks with running water are essential; mops, pails, polishing materials should be placed within easy reach; equipment for preparing and serving snacks will be found here also.
3. Materials for sensory development — puzzles, blocks, put-together toys, peg board sets, beads, fastening frames — should be arranged in a particular section of the room.
4. Materials for intellectual development — sandpaper and magnetic letters and numbers, counting beads, books, maps, globes — should occupy another section of the room.
5. Not all materials need to be put out at once; as the observer-teacher sees that certain children have reached a particular stage of development, new materials will appear on the shelves.
6. An area should be set aside as a garden — hopefully an outdoor area adjoining the classroom; if outdoor space is not available, space should be provided for plantings inside the classroom.
7. In arranging for the student population an attempt should be made to include children of varying ages — three, four, and five year olds — in a single class.

- no attempt should be made to separate siblings or relatives into separate classes.
8. The school year will begin with only a fraction of the student body in attendance; new students will be added weekly until the class is "normalized" about two months after the beginning of school.
 9. An attempt should be made to integrate middle and lower class children in the same classroom; if the excellence of the program is recognized and a policy of open enrollment is pursued, middle class parents will be anxious to have their children attend even if they must furnish transportation.
 10. Time distribution schedule must be very flexible; large blocks of time should be set up for the children to choose their own activities; these periods of individual work will be separated by shorter periods of group activity — music and language and conversation periods.
 11. Teachers selected to work in such programs must be flexible and humble; they must be willing to discard prejudice of any kind and to learn from observing their students; experience is not necessary if the teacher is willing to work hard and to learn on the job.
 12. Teachers will begin the year with a workshop of two weeks' duration during which attitudes, procedures, and materials will be discussed.

13. Periodic in-service sessions will help to keep teachers aware of Montessori's theories as they apply to their particular schools.
14. The teacher will think of herself as an observer and preparer; carefully observing each child she will know when he is ready for a new activity or material.
15. New materials will be demonstrated to each pupil individually by the teacher, who will use actions more than words.
16. The teacher must allow the child complete freedom in so far as he does not do anything harmful to himself or others; he will be free to make mistakes, but, since most of the materials are self-correcting, such mistakes should not be too numerous.
17. If it is necessary to interrupt a child's work, provision should be made for him to lay it out in such a way that he can return to it later; sufficient time must be given to the child before expecting him to change activities.
18. Teachers and aids must have an attitude of respect for the individuality of the child; he must never be forced to conform for the mere purpose of conformity.
19. Teachers should be prepared to begin instruction in reading and mathematics at a very early age; an alert teacher will recognize when the child is ready; she will

know, too, that there is nothing to be gained from putting off instruction until first grade.

The suggestions listed above are not to be considered exhaustive. However, it is hoped that they will be useful to those involved in setting up kindergarten and prekindergarten programs. Continued study, as well as the experiences of teachers in Montessori-orientated preschool programs, will tend to enlarge and clarify the attitudes, procedures, and materials which prove to be most effective in work with deprived kindergarten and prekindergarten children.

APPENDIX I

SCHOOLS VISITED FOR SURVEY

Anderson Playground Prekindergarten, Oak Park

Cabrini Center Nursery School, Chicago

Carpenter School, Chicago

Hanson Park School, Chicago

Hatch School, Oak Park

Hay School, Chicago

Hefferan School, Chicago

Key School, Chicago

King School, Chicago

Lewis School, Chicago

Lovett School, Chicago

Lyon School, Chicago

May School, Chicago

Melody School, Chicago

Nixon School, Chicago

Ogden School, Chicago

St. Edmund School, Oak Park

St. Frances of Rome School, Cicero

St. Giles School, Oak Park

Smyser School, Chicago

Sumner School, Chicago

Wicker Park School, Chicago

Young School, Chicago

MONTESSORI SCHOOLS VISITED

Alcuin Montessori School, Oak Park

Ancona Montessori School, Chicago

Cabrinⁱ Center Montessori School, Chicago

Elmhurst Montessori Human Potential School, Villa Park

Near North Montessori School, Chicago

Oak Park Montessori Child Development Center, Oak Park

APPENDIX II

CHECKLIST USED IN SURVEYING KINDERGARTENS AND PREKINDERGARTENS

Classroom Appearance

- ___ The room is cheerful, colorful, and pleasant.
- ___ Bulletin boards are attractive and current.
- ___ Displays of materials pertaining to current areas of study are attractively arranged.
- ___ Children's work is posted in various areas around the classroom.

Equipment

- ___ Each child has his own table and chair.
- ___ There is a piano in the room.
- ___ Record players, movie and filmstrip projectors are available.
- ___ Book shelves are placed at convenient height for children to use.
- ___ Storage space is so situated that children can help themselves to materials.
- ___ Large play equipment is located in the classroom.
- ___ Blocks of various sizes and shapes are available for use.
- ___ Puzzles, take-apart toys, nested boxes, peg sets, beads,

fastening devices, and other manipulative materials are conveniently placed for children's use.

Tools — saws, hammers, vice, chisels — are available for woodworking projects.

Creative materials for art and musical experiences are readily available.

Story books, picture books, and easy readers are displayed so that children may handle and read them or pick selections for the teacher to read to them.

Materials for nature study — aquarium, birds, insect collections, small mammals — are available.

Toys such as dolls, tea sets, irons, trucks, cars, bean bags, balls, jump ropes are set apart in a section of the room for children's use.

Globes and puzzle maps are available for children's use.

Learning Activities

Provision is made for considerable individual work and instruction as well as the usual group activities.

Children direct activities in the sense that they indicate their needs and desires and plan their own activities.

In planning the program of instruction care is taken that activities are arranged in a sequential manner.

Provision is made for directed instruction in reading readiness and in beginning reading.

Directed instruction in mathematics is carried on

- ___ Play activities have an important place especially as an element in socialization.
- ___ Practical life exercises such as sweeping, washing, preparing and serving foods, polishing are provided for.
- ___ In scheduling care is taken to provide rather large blocks of time so that children are not rushed from one activity to another.

The Teacher

- ___ The teacher sees herself as an observer and a preparer of the environment.
- ___ The teacher is kindly, but she does not attempt to be a mother substitute.
- ___ Enthusiastic and happy, the teacher infects the children with her spirit.
- ___ With regard to discipline, the teacher realizes that the only lasting discipline is self-discipline. Therefore, she frees the child to develop his own will within the limits of safety and social acceptance.

Attitudes Towards Montessori

- ___ The teacher is well acquainted with the theories of Maria Montessori, having read several books or articles on the subject and visited Montessori schools.
- ___ The teacher is enthusiastic about Maria Montessori's theories and would like to be a part of implementing them in her own classroom situation.

Rating Scale

In using this check list the author indicated by using numbers from 0 to 3 to what extent the particular practice was observed.

- 0 -- not at all
- 1 -- to some extent
- 2 -- an average amount
- 3 -- to an appreciable degree

BIBLIOGRAPHY

I. PRIMARY SOURCES

- Montessori, Maria. The Absorbent Mind. Madras, India, 1961.
- The Child and the Church. St. Louis, 1929.
- Dr. Montessori's Own Handbook. New York, 1965.
- The Discovery of the Child. Madras, India, 1948.
- Education for a New World. Madras, India, 1946.
- The Formation of Man. Madras, India, 1955.
- The Montessori Elementary Material. Cambridge, 1964.
- The Montessori Method. Introduction by J. McV. Hunt.
New York, 1964.
- Pedagogical Anthropology. New York, 1913.
- The Secret of Childhood. Bombay, India, 1936.
- e----- Spontaneous Activity in Education. Introduction by John
J. McDermott. New York, 1965.
- To Educate the Human Potential. Madras, India, 1948.
- What You Should Know About Your Child. Madras, India,
1961.

II. SECONDARY SOURCES

A. BOOKS

- Boyd, William. From Locke to Montessori. New York, 1914.
- Bruner, Jerome S. "After John Dewey, What?" American Education

Today, edited by Paul Woodring and John Scanlon (New York, 1963), pp. 39-51.

- The Process of Education. Cambridge, 1960.
- Comenius, John Amos. The School of Infancy. Chapel Hill, 1956.
- Doman, Glenn. How to Teach Your Baby to Read. New York, 1964.
- Fisher, Dorothy Canfield. The Montessori Manual. Chicago, 1913.
- Fleege, Virginia. Standard Operating Procedure for a Montessori School. Oak Park, 1964.
- Froebel, Friedrich. The Education of Man. New York, 1898.
- Gesell, Arnold. The First Five Years of Life. New York, 1940.
- Hammond, Sarah Lou, Ruth J. Dales, Dora Sikes Skipper, and Ralph L. Witherspoon. Good Schools for Young Children. New York, 1963.
- Hechinger, Fred M., editor. Pre-School Education Today: New Approaches to Teaching Three-Four-and Five-Year Olds. Garden City, New York, 1966.
- Kilpatrick, William Heard. The Montessori System Examined. Boston, 1914.
- Piaget, Jean. The Language and Thought of the Child. New York, 1926.
- The Origins of Intelligence in Children. New York, 1952.
- Rambusch, Nancy McCormick. Learning How to Learn. Baltimore, 1962.
- Riessman, Frank. The Culturally Deprived Child. New York, 1962.
- Silberman, Charles E. Crises in Black and White. New York, 1964.
- Standing, E. M. Maria Montessori, Her Life and Work. New York, 1962.
- The Montessori Method: A Revolution in Education. Fresno California, 1962.

B. ARTICLES

- Alban, Sister Mary. "Montessori Method Applied!" Catholic School Journal, LC (December, 1961), 23-26.
- Banta, Thomas J. "Education of Children for Adulthood," Young Children, XXI (May, 1966), 278.
- Beyer, Evelyn. "Let's Look at Montessori," Journal of Nursery Education, XVIII (November, 1962), 4-9.
- "Montessori in the Space Age," National Education Association Journal, LII (December, 1963), 35-36.
- Brunner, Catherine. "Deprivation — Its Effects, Its Remedies," Educational Leadership, XXIII (November, 1965), 105.
- Burnett, Alice. "Montessori Education Today and Yesterday," Volta Review, LXV (May, 1963), 235-239.
- Clark, Aubert J., O. F. M. "Evaluation of Montessori Postulates in the Light of Empirical Research," Catholic Educational Review, LXI (January, 1963), 7-15.
- "Montessori and Catholic Principles," Catholic Educational Review, LX (February, 1962), 73-81.
- "Montessori Correspondence Course: Description and Comment; St. Nicholas Training Center, London," Catholic Educational Review, LXII (December, 1964), 577-589.
- Denny, Terry. "Montessori Resurrected: Now What?" Educational Forum, XXIX (May, 1965), 436-441.
- Edmonson, B. "Let's Do More Than Look, Let's Research Montessori," Journal of Nursery Education, XIX (November, 1963), 36-41.
- Gonzaga, M. "Maria Montessori: Her Discoveries and Influence," Catholic School Journal, LXIV (October, 1964), 33-37.
- Havighurst, Robert J. "Who Are the Disadvantaged?" Education, LXXXV (April, 1965), 456-457.
- Hymes, James L., Jr. "Montessori," Educational Leadership, XXIII (November, 1965), 127.
- Krippner, Stanley. "Materials and Methods in Reading: the Montessori Approach," Education, LXXXV (April, 1965), 468.

- Kvaraceus, William C. "Programs for the Disadvantages: Promise or Pretence?" National Elementary Principal, XLV (February, 1966), 59.
- Marland, Sidney. "How to Plan for Three-and Four-Year-Olds," Nations Schools, LXXVI (November, 1965), 45-48.
- Martin, J. W. "Montessori After Fifty Years," Teachers College Record, LXVI (March, 1965), 552-554.
- Millar, B., Jr. "Montessori: The Model for Pre-School Education?" Grade Teacher, LXXII (March, 1965), 36-39.
- Mills, W. H. and G. L. McDaniels. "Montessori Yesterday and Today," Young Children, XXI (January, 1966), 137-141.
- Montessori, Mario. "Maria Montessori's Contribution to the Cultivation of the Mathematical Mind," International Review of Education, VII (1961), 134-144.
- Pitcher, E. G. "Evaluation of the Montessori Method in Schools for Young Children," Childhood Education, XLII (April, 1966), 489-492.
- Plank, E. N. "Reflections on the Revival of the Montessori Method," Journal of Nursery Education, XVII (May, 1962), 131-136.
- Rambusch, Nancy McCormick. "Montessori Approach to Learning," National Catholic Education Association Bulletin, LVIII (August, 1961), 320-322.
- Schill, Britta. "Montessori System," Childhood Education, XXXIX (December, 1962), 171-175.
- Spodek, Bernard. "Montessori Education Visited," Elementary English, XLII (January, 1965), 75-79.
- Stendler, Cecilia. "Montessori Method: Review," Educational Forum, XXIX (May, 1965), 431-435.
- Wakin, Edward. "The Return of Montessori," Saturday Review, XLVII (November, 1964), 61-63.

APPROVAL SHEET

The thesis submitted by Mary Ellen Holden Clark has been read and approved by the director of the thesis. Furthermore, the final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content, form, and mechanical accuracy.

The thesis is therefore accepted in partial fulfillment of the requirements for the Degree of Master of Arts.

Jan. 24, 1967 Douglas F. Van Bramer
Date Signature of Adviser