

A PROJECT TO TEST THE INTERJUDGE  
RELIABILITY AND CONSTRUCT VALIDITY OF  
FORMATIVE EVALUATION FOR PRESCHOOL OBJECTIVES

FOR REFERENCE

NOT TO BE TAKEN FROM THIS ROOM

by

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## ABSTRACT

This project was designed to test the interjudge reliability and construct validity of Formative Evaluation For Preschool Objectives.

For the realization of the project, two different age groups of 3 year-olds and 5 year-olds were selected. The participants of the study were separated into two groups as experimental and control groups for both ages. Each group consisted of 5 children. After the administration of the instrument to all groups, during 2 months, only the children in the experimental groups for both ages were trained. When the training was over, the same instrument was administered to all groups again.

The interjudge reliability of the instrument was determined after the first administration of the instrument to all children. The interjudge reliability of the instrument was done between two independent judges. The results show that the interjudge reliability of the instrument was high for both age groups.

The hypotheses of the study deal with the effect of development and training on children's performance. The

statistical analysis of each hypothesis of the study was done through t-tests.

The results show that the first and second hypotheses of the study which were related to the effect of intra-child and inter-group development, were substantiated. The instrument seems to be quite sensitive to intra-child development through time as well as to the different levels of performance across age groups. The third hypothesis of the study which was related to the effect of training on children's performance was not unconditionally substantiated. But there was a trend in the 5 year-olds that the training had an effect.

This is the first time, the instrument Formative Evaluation for Preschool Objectives which was developed by Güzver Yildiran, in 1978, was being tried on a Turkish sample. This evaluation device is based on global preschool objectives. These kinds of instruments are very few in areas of preschool education. Thus, this study might be considered a pilot study which evaluates the interjudge reliability and the construct validity of the instrument.



## Ö Z E T

Bu projenin amacı, Güzver Yıldırım tarafından 1978'de geliştirilen ve 1982'de Türkçe'ye uyarlanan Okul Öncesi Her-  
deflerine Dönük İzleyici Değerlendirme Ölçeğinin hakemler-  
arası güvenirliğini saptamak ve aynı ölçeğin yapı geçerlili-  
ğini sinamaktır.

Projenin gerçekleştirilmesi için, üç ve beş yaş olmak üzere iki ayrı yaş grubu seçilmiştir. İki ayrı yaş grubundaki çocuklar ayrıca deneysel ve kontrol gruplarına ayrılmışlardır. Her bir grup 5 çocuktan oluşmuştur. Bu ölçeğin bütün gruplara uygulanmasından sonra, 2 ay süreyle, her iki yaş ke-  
sitinden sadece deneysel gruplardaki çocuklara eğitim veril-  
miştir. Eğitim süresinin sonunda bütün gruplara aynı ölçek  
tekrar uygulanmıştır.

Ölçeğin hakemler-arası güvenirliği, bütün çocuklara  
yöneltilen ilk uygulamadan sonra saptanmıştır. İki ayrı hake-  
min verdiği puanlar ölçeğin hakemler-arası güvenirliğini sap-  
tamak için kullanılmıştır. Sonuçlar ölçeğin hakemler-arası  
güvenirliğinin her iki yaş grubunda da yüksek olduğunu gös-  
termektedir.

Araştırmanın denenceleri, gelişim ve eğitimin çocukların edimleri üzerindeki etkileriyle ilgilidir. Her denencenin istatistiksel analizi t-test kullanılarak yapılmıştır. Sonuçlar, gelişimin çocukların edimleri üzerindeki etkileri ile ilgili olan birinci ve ikinci denencelerin desteklendiğini göstermektedir. Bu da Ülçegin gelişim farklarına duyarlı olduğuna göstermektedir. Araştırmanın uygulanan eğitimin çocukların edimleri üzerindeki etkileriyle ilgili olan üçüncü denencesi tamamiyle desteklenmemiş ise de, 5 yaş grubunda, uygulanan eğitimin etkin olduğuna işaret eden bir eğilim görülmüştür.

#### Okul Öncesi Hedeflerine Dönük İzleyici Değerlendirme

Ülçegi ilk defa bu araştırmada bir Türk örneklemi üzerinde denemiştir. Bu değerlendirme aracı okul-öncesi hedeflerine dayalıdır. Okul-öncesi eğitimi alanında böyle ölçekler çok azdır. Bu araştırma, sömü geçen Ülçegin hakemler-arası güvenirliğini ve yapı geçerliliğini sınavan bir ön-araştırma olarak kabul edilebilir.

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Understand and produce elaborated language

37. Describe

A. The child recognizes the description of an object by choosing the correct picture corresponding to that description among other pictures.

| 1           | 2        | 3         | 4        | 5          |
|-------------|----------|-----------|----------|------------|
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

B. The child describes an object in a picture.

| 1           | 2        | 3         | 4        | 5          |
|-------------|----------|-----------|----------|------------|
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

38. Narrate

A. The child understands and produces the narration of events in simple language forms.

| 1           | 2        | 3         | 4        | 5          |
|-------------|----------|-----------|----------|------------|
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

Example: The child is able to narrate a story after being read to by looking at a sequence of pictures in simple language forms.

B. The child understands and produces the narration of events in complex language forms.

| 1           | 2        | 3         | 4        | 5          |
|-------------|----------|-----------|----------|------------|
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

Example: The child is able to narrate a story after being read to by looking at a sequence of pictures in complex language forms.

39. Generalize, explain, predict.

A. The child is able to understand "because", "and", "or", and "but" statements.

| 1           | 2        | 3         | 4        | 5          |
|-------------|----------|-----------|----------|------------|
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

B. The child is able to produce "because", "and", "or" and "but" statements.

| 1           | 2        | 3         | 4        | 5          |
|-------------|----------|-----------|----------|------------|
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

## I. INTRODUCTION; STATEMENT OF THE PROBLEM

Recently preschool education has gained a greater emphasis by the general public as well as by policy makers due to the increase in the number of working mothers in the cities of Turkey. Although some preschool centers are no more than custodial institutions, it is the aim of some preschool programs to provide educational opportunities for the attending children. However, there is hardly any standardization in these educational efforts. Children who attend a particular preschool center come there with different levels of development. These initial individual differences may affect how much children will finally profit from the education available to them.

Certain educational psychologists (Kamii and Gazon in Bloom et al., 1971) have delineated some global preschool objectives which enhance the probability of relatively high levels of learning in the elementary school especially in the earlier grades. However there are very few, if any, evaluation instruments which enable a teacher to find out at what level of functioning a child is vis à vis these educational objectives. Such an evaluation device would be rather different

from an I.Q. test since the aim of an evaluation instrument is not to be an index of a stable characteristic, but instead to help the teacher by giving feedback to him/her regarding what the child lacks. With this knowledge, the teacher then may develop or use certain materials and methods to enable the child to perform at a higher level on a given objective.

Such an evaluation instrument was developed by Güzver Yildiran at Roosevelt University, in 1978. In explaining the aim of the instrument Yildiran states,

This is an observational instrument to help the teacher to find out the child's level of functioning. It is based on the objectives which are thought to be relevant and important for preschool educational programs (Bloom, Hastings and Madaus, 1971). The aim of this instrument is not only to evaluate the child. The major purpose is rather to consider the objectives of preschool education and help the child in areas where his learning is not complete. If a child scores below what would be expected for his age level on that objective, the teacher should make sure that the child receives help so that he can attain the specified objective. In this sense, the instrument is both an evaluative device as well as a teaching aid.

The instrument deals with global objectives and gives the teacher maximum freedom to think of different examples with which to test the child on that particular objective as well as providing help for the child who is not responsive in a particular area. Some examples of instructional suggestions are given as an aid to the teacher. These are not exhaustive. Each teacher will think of different ways of intervening to aid a child in ways that are most appropriate for the individual child after observing

him at different times. In this sense the instrument is not similar to an I.Q. test or a test measuring the abilities of a child. Rather, it should be viewed as a teaching aid."(Yildiran, 1978).

The objectives of the present instrument fall into four categories (See Kamii and Cazden in Bloom et al., 1971).

1. Perceptual-motor development
2. Cognitive development
3. Language development
4. Socio-emotional development.

The aim of this project includes several investigations. First we shall test the instrument's interjudge reliability. Secondly, the instrument's construct validity will be tested by examining whether or not the level of functioning on an objective is influenced by the child's development. A child evaluated at one point in time should perform at a higher level on these objectives at another point in the future. Finally, older preschool children should perform better on the average in comparison to younger children. Therefore the intra and inter-child differences in chronological development will be investigated.

In addition to the above stated investigations, the effect of training on correcting original deficiencies indexed by the above stated objectives will be investigated. It is hypothesized that training given on objectives when performance is lower than what is expected will have positive effects on



performance beyond that of mere chronological development.

It is, thus, the aim of this project to shed some light on the above stated issues.

## II. SURVEY OF LITERATURE

The survey of literature will include, first a brief theoretical and historical background of preschool education in the U.S.A. and in Turkey. This section will be followed by the development of different types of objectives which are widely emphasized and shared by these programs. The survey is by no means exhaustive, but rather should be viewed as giving the basic outlines of preschool education.

### The Theoretical Background of Preschool Education

Early childhood education was affected broadly by the thoughts and ideas of European educators such as Comenius, J.J.Rousseau, Pestalozzi and Froebel. (Almy, 1975; Evans, 1975; Share and Dowley in Anderson and Shane, 1971).

Comenius (1592-1670) emphasized the importance of the family on the development of the young child up to six years of age (Dowley in Anderson and Shane, 1971; Kanad, 1963). Jean-Jacques Rousseau (1712-1778) influenced the educators with his ideas especially in his novel, "Emile". According to Rousseau, the aim of education is the development of the

potentialities of the whole child which exist in him naturally (Kanad, 1963). Pestalozzi (1746-1827) pointed out the importance of the parents and the social environment on the development of the child. Pestalozzi also pointed out the importance of early sensory training in the early education of children (Dowley, 1971; Kanad, 1963). Pestalozzi implemented his ideas about education in his own school which he established in Burgdorf, Switzerland (1799) which was very famous all over the Europe (Kanad, 1963).

Froebel (1782-1832) was influenced by the ideas of Pestalozzi and visited the educator in 1805 and in 1808 in an effort to combine Pestalozzi's thoughts and implementations to his own thoughts (Kanad, 1963). Emphasizing the importance of sensory training, Froebel enumerated the components of sensory training as sizes, shapes, weights, numbers, colors, movements, directions and sounds (Kanad, 1963). He developed materials of sensory training which to this day are referred to as "the Gifts Froebel" (Evans, 1975; Kanad, 1963). Froebel opened a school for young children in 1837, in Blankenburg, Germany. He coined the term "kindergarten" in 1839 for his school of early childhood education implying the importance of play and nature on child development (Kanad, 1963; Evans, 1975; Dowley in Anderson and Shane, 1971).

## History of Preschool Education in U.S.A.

In the mid-eighteenth century, the ideas and thoughts of European educators strongly affected the movement of early childhood education in the U.S.A. Gradually American educators started to produce their ideas and thoughts about early childhood education. The famous American philosopher and pedagog John Dewey (1859-1952) influenced many educators with his functional psychology approach. According to Dewey, human beings can learn only through their active experiences with their environment (Peters, 1952).

In the beginning of the movement of the early childhood education, some educators tried to establish kindergartens. Susan Blow (1843-1916) established the first kindergarten after the Civil War, in Missouri (Evans, 1975). Patty Smith Hall another educator, translated Dewey's ideas into kindergarten level (Evans, 1975).

Because of the increasing interest for early childhood education, first public preschools in the USA were established in 1919 (Evans, 1975). Usually the first nursery schools were opened for research purposes in colleges and universities (Kamii in Bloom et al., 1971). In the 1930s, the federal government was involved in early childhood education for the first time (Kamii in Bloom et al. 1971; Dowley in Anderson and Shane, 1971). During the depression years, the main objective of these nursery schools was to

provide jobs for unemployed teachers and to protect children's physical health (Kamii in Bloom et al.; Dowley in Anderson and Shane, 1971).

During the Second World War, the U.S.A. government assigned federal funds for day-care centers for children as a result of the increase in the number of working mothers (Kamii in Bloom et al.; Dowley in Anderson and Shane, 1971). Meanwhile the work of Freud's focused interest and emphasis on the socio-emotional growth of children in their early years (Kamii in Bloom et al., 1971).

In the 1960s, interests towards early childhood education started to concentrate on the cognitive development of children. According to Kamii (Kamii in Bloom et al., 1971), there were mainly two reasons for this interest: First was the effect of the civil rights movement. This movement caused the increase in federal funds towards efforts preventing school failures among lower-lower-class children (Kamii in Bloom et al., 1971). Secondly the accumulation of knowledge about cognitive growth of children was noteworthy (Kamii in Bloom et al., 1971).

Hunt (Intelligence and Experience, 1961) and Bloom (Stability and Change in Human Characteristics, 1964) expressed the view that early childhood had lasting effects, sometimes

irreversibly so on future development.

The findings in this area had some policy implications as seen, for example, in the Head Start movement (Evans, 1975; Kamii in Bloom et al., 1971; Shane in Anderson and Shane 1971).

According to Bloom (1966) the most rapid development of children takes place until age four in especially cognitive growth. Also physical characteristics of children show the most rapid development during the early years of life. Environment has great effects on the growth of children in children's early critical years. Deprivation in the first four years of children's lives is much more determinantal than deprivation in the later years. Bloom (1966) indicates that the earlier development is the base for later development. Briefly, according to Bloom's view, early learnings and early environments have the most powerful effects on children's development (Bloom, 1966).

Hunt opposed the assumption that "intelligence is fixed and that development is predetermined" (1971). Hunt emphasized the effects of environmental stimuli and the child's experiences on early cognitive learning (Hunt, 1971, 1976). Hunt indicated that early stimulus deprivation hinders intellectual growth of children. Hunt (1976) pointed out that even neuroanatomical growth of children is highly

related to children's environmental conditions. Hunt (1976) shared with Bloom the idea that corrective efforts should be provided for very young children before the age of four. Hunt argued that poverty caused the deprivation of children (Hunt, 1976).

### Current Status of Preschool Education in the U.S.A.

Today, preschool education shows a great variance both in the fields of activities as well as the quality and kind of programs in the U.S.A. The differentiation in status of nursery schools as illustrated by Evans in that

Nursery schools exist on the campuses of colleges and universities, in churches, homes, shopping centers, and civic buildings. Some are commercial, others are nonprofit. Some require professional credentials, others do not. Some are exclusively parent-cooperative ventures, while others may exercise no apparent commitment to parental involvement. Some accommodate three-four and five-year-olds, others accept four-year-olds only. Some are limited to half-day programs, others include a full-day. Some schools convene two or three days a week, others utilize the full five-day week. In short variation is the rule rather than exception (Evans, 1975, p.52-53).

### History of Preschool Education in Turkey

Before the Turkish Republic was founded, the first nursery schools and classes were opened in 1915 in Turkey. When the Republic was established, there were 80 nursery

schools and attending these were 5880 children in 38 cities (Unesco Report, 1977; Bekman, 1982). In 1928, governmental interest shifted to the reading-writing movement with the acceptance of the new alphabet (Unesco Report, 1977; Bekman, 1982; Report of XI. National Council, 1982). Therefore the interest in preschool education disappeared until 1960.

In the 1960s, there was some healthy promotions of early childhood education. The development in industrialization with its effects on the migration from the rural to the urban areas (Bekman, 1982); changed the family structure from an extended to a nuclear one (Timur in Abadan Unat et al., 1979); the inclusion of the women in service of industry increased the demand for child care and preschool education (Özbay in Abadan-Unat et al., 1979).

It could be speculated that ideas about training lower-lower-class children which were imported from other developed countries, affected the Turkish preschool movement, especially the efforts to educate socio-economically underprivileged children. Thus, in 1961 the Law of General and Primary Education determined the status of preschool education to be complementary within the primary educational framework (Bekman, 1982; Report of X. National Educational Council, 1981). The emphasis was focused on the teaching of the Turkish language among children who could not speak standard Turkish; training children in need of special education; caring for the children of working parents; and preparing experimental grounds for



teacher training (Bekman, 1982; Report of X. National Educational Council, 1981). The development of preschool education gained significant speed during the period of 1970-1976, indicated by the establishment of 78 private nursery schools and 118 preclasses during this period (Bekman, 1982; Unesco Report, 1977). In the Tenth National Educational Council in 1981, a policy decision was made to formally start preschool education in Turkey. According to that decision, preschool education will start one year before the child enters the primary school. After some pilot studies in various schools and settings, preschool education may gradually become obligatory in all primary schools (Kagıtcıbaşı, 1981).

#### Current Preschool Education in Turkey

In Turkey, preschool education is mainly continued under two rubrics<sup>(1)</sup>:

- I- Nursery schools: Children between 3-6 years of age attend these schools supervised by the Ministry of Education.
- II- Day-Care centers: Children between 0-6 years of age attend these schools supervised by the Ministry of Health and Social Welfare.

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(1) This information is taken from Bekman's study, 1982 and Unesco Report, 1977.

Both of these types of centers may utilize non-governmental sources. The centers which utilize non-governmental sources are listed below:

1. Private centers: Their primary aim is commercial. These centers show a wide variety in terms of their quality of facilities and services.

2. Centers of children's foundations: Their primary aim is the provision of social service programs, usually orphans, very poor children or children of single parents attend these.

3. Centers belonging to ethnic groups: Usually each ethnic group living in Turkey has its own centers for preschool education.

4. Centers belonging to foreign groups: These centers provide some preschool services for foreign groups in Turkey.

5. Centers belonging to factories: According to the labor law in 1973 (number 14622), factories which employ 200 or more female workers must open preschool centers in their factories.

The governmental preschool centers are either supervised by the ministries or they are part of other governmental institutions.

1. Those that are supervised by the ministries include the following:

A. Centers belonging to the Ministry of Education:

These centers are administered by the Ministry of Education. Financial sources are provided from the donation of parents.

B. Centers belonging to the Ministry of Health and Welfare: These centers are of two types:

i) Childcare houses.

These centers are directly financed by the government. Orphans or children who are separated from their parents live in these centers.

ii) Daycare centers.

Their primary aim is the provision of services for working mothers. Very poor mothers can also utilize these centers without a fee.

2. Centers that are part of government institutions include the following:

A. Child centers of universities:

Some universities have preschool centers which provide child care services for their personnel as well as enabling the university to carry on research.

B. Child centers of government sector industries:

According to the Labor Law passed in 1973, factories or industrial settings must open preschool centers for their personnel. These centers receive their

financial resources from the ministries to which they belong. For example The Ministry of Customs and State Monopolies finance and administrate preschool centers for their personnel.

### Different Types of Preschool Programs

In this section different types of preschool programs which operate in the U.S.A. will be briefly presented. These general programs should not be confused with the general objectives of preschool education. Although the different types of preschool education programmers may agree on the same general objectives of preschool education, their ways/ styles for reaching these objectives may be different. Usually general objectives of preschool education are accepted as perceptual-motor, cognitive, language, and socio-emotional developments of children. Each program may have different content, methodology, materials, settings, and personnel. Children can be educated according to the characteristics of the program in order to develop themselves.

The different types of preschool programs were mainly divided into two categories as the traditional nursery schools and the cognitively oriented preschool programs.

#### 1. The Traditional Nursery School

The main objectives of the traditional nursery schools are socio-emotional and perceptual-motor developments of the

child (Kamii in Bloom et al., 1971). Beyond these main objectives, traditional nursery schools deal with many cognitive activities in less systematic and less specific ways. Also these nursery schools deal with language through a non-systematical approach. As is easily seen, the socio-emotional objectives supersede those of either the cognitive or the language development type. Kamii indicated the underlying assumption of the traditional nursery schools as "If the child's feelings of independence, mastery, and adequacy are developed, his cognitive growth will naturally follow" (Kamii in Bloom et al., 1971, p.296).

#### II. The Cognitively Oriented Preschool

The cognitively oriented preschool educators agree on the importance of cognitive learning as an indicator of academic success in later formal school periods. Evans (1976) called this approach preparatory and readiness-building. Thus, mainly the cognitively oriented preschool emphasizes the importance of school readiness activities for preventing school failures among children of the lower-lower-class (Kamii in Bloom et al., 1971).

The cognitively oriented preschool education could be examined within the framework of either the non-Piagetian or the Piagetian programs.

## 1. Non-Piagetian Programs

The non-Piagetian Programs might be separated into two headings. These include the programs in which the traditional methods are used as well as those that implement the Bereiter-Engelmann programs.

### A. Non-Piagetian Traditional Programs

In these non-Piagetian traditional programs, essentially traditional nursery school methods are systematically used (Kamil in Bloom et al., 1971). Among these, the Montessori approach and the method of Gray and Klaus will be briefly discussed.

The Montessori Method: Maria Montessori (1870-1952) is the famous Italian educator in childhood education in early 20th century (Standing, 1967; Kohlberg in Hess and Bear 1968; Dowley in Anderson and Shane, 1971; Evans, 1975). Montessori started her studies in the slum areas of Rome with disadvantaged children (Evans, 1975; Standing, 1967; Dowley in Anderson and Shane, 1971). After her successful experience, Montessori reasoned that normal children could benefit more than disadvantaged children from this program in an organized environment. Taking this perspective as her initial proposition, she developed her famous educational method (Evans, 1975). Montessori emphasized the importance of the development of sensory perception and reasoning through the use of materials

which stimulate the senses of children (Standing, 1967; Evans, 1975). Montessori also emphasized the importance of early childhood years for the development of reality orientation. This could be achieved by using through their natural interest and their free activities in an organized environment (Standing, 1967; Evans, 1975; Kohlberg in Hess and Bear, 1968). Standing summarized the method as "a method of education through the sense and sense training" (1967, p.7). In addition to sensory development, Montessori also emphasized motor and language development within organized environments and activities (Standing, 1967; Evans, 1975).

Gray and Klaus's Early Training Project: Gray and Klaus explained their project as an intervention research study for decreasing the progressive retardation in school achievement and general cognitive development of the culturally deprived children as they pass through elementary school with specially planned techniques (Gray and Klaus in Hess and Bear, 1967). Two main objectives of this program are:

i) Development of attitudes related to achievement: These attitudes include achievement motivation, delay of gratification, persistence, interest in school-type activities, and identification with achieving models.

ii) Development of aptitudes related to achievement: These aptitudes include perceptual development, the development of concepts and language development.

In this program cognitive and perceptual motor objectives are primarily emphasized. Only through the attainment of these objectives language and socio-emotional development can be actualized.

After having discussed the non-Piagetian traditional programs, we shall now briefly discuss the Bereiter-Engelmann program.

#### B. The Bereiter-Engelmann Program

The objectives of this program primarily focuses on language development as a tool to affect cognitive development. Kamii stated that "They conceive of cultural deprivation as language deprivation and argue that words related to logic are particularly important for the child if he is to get along in school" (Kamii in Bloom et al., 1971, p.292). While the perceptual-motor development is not part of this program, the teacher-pupil social relationship is accepted as a by-product rather than an objective of preschool education by Bereiter-Engelmann (Kamii in Bloom et al., 1971).

Another main group of programs include those that use the Piagetian approach.

#### 2. The Piagetian Programs

Evans (1975) cited three applications of Piagetian thought to early childhood education. These are:



#### A. The Lavatelli Curriculum

The general objective of the Lavatelli curriculum is the child's development of intellectual competence through self-activity and questioning (Evans, 1975). This objective has three components:

- i) The ability to classify in order that children can achieve economy in structuring their environment.
- ii) The use of number, measurement and space operations, particularly in relation to conservation.
- iii) The use of seriation operations with the aim of assisting children to establish relations between objects (See Evans, 1975).

Lavatelli emphasized mainly language and cognitive development. She focused on value of play. As a side effect of play, perceptual-motor and social development would be enhanced.

#### B. The Ypsilanti Curriculum

Weikart and his colleagues in Ypsilanti, Michigan stated that

a child's understanding of self and world springs from two basic abilities:

- a) an ability to anchor oneself in space and time and

- b) an ability to order and classify events and objects.

This means that children must begin to construe, then organize, relationship among the things they encounter in the environment. They also must establish mental representations of themselves and their environment for the increasingly complex and abstract purposes of thinking (Evans, 1975, p.267).

While the cognitive objectives of this curriculum are based entirely on Piaget's framework, socio-emotional objectives are derived indirectly from Piaget. Although the focus is not on perceptual-motor objectives, they are not totally omitted. These secondary objectives are derived from the traditional nursery school according to Kamii (Kamii in Bloom et al., 1971). The language objectives of Ypsilanti curriculum are also influenced indirectly by Piaget's theory.

#### C. Kamii and DeVries Interpretation of Piaget for Early Childhood Education

Kamii and DeVries developed an early childhood education program based on Piagetian theory (Evans, 1975). They considered the four major objectives of preschool programs (i.e. the perceptual-motor, cognitive, language and socio-emotional).

Two main reasons are stated by Kamii for explaining why they based their program on Piaget's theory.

One is that his theory enables the teacher to delineate and teach the broad basic abilities that are necessary for all the subjects that a child will have to cope with in elementary school.

The other is that Piaget's theory encompasses all the activities that were developed by the traditional nursery school, and adds a great deal of depth and a developmental perspective to these activities (Kamii in Bloom et al., 1971, p.298).

The aim of the application of Kamii and DeVries program is neither the attempt to teach specific Piagetian tasks nor to accelerate the rate of child development (Evans, 1975). Evans summarizes their aim as "Instead, Kamii and DeVries's general aim is total development; preschool education is simply a means to enrich a child's opportunities for constructivism" (Evans, 1975, p.235). According to Evans (1975), since this program includes intensive teacher training, traditionally oriented preschool teachers may vary in their acceptance of this program.

### Objectives of Preschool Education

Having discussed the various preschool programs; we will now try to state some general objectives which find differing degrees of emphasis within each program.

The history of preschool education reflects that general and abstract objectives<sup>(1)</sup> of preschool education gradually

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(1) Information about the different types of objectives with the exception of those related to language development are taken from Kamii's discussion in Bloom et al., 1971.

became more specific and various due to social, theoretical and empirical influences. Although there are various approaches to preschool education, most of the educators agree on these broad objectives of preschool education.

### I. Objectives related to Perceptual-Motor Development

The perceptual-motor objectives of preschool education are extended to develop muscular coordination of children according to their physical maturational levels. Kamii stated that "Perceptual-motor abilities are those which enable the child to do with his muscles what he wants and intends to do" (Kamii in Bloom et al., 1971, p.288). Perceptual-motor development is considered to be important for physical and psychological health.

### II. Objectives related to Cognitive Development

Kamii emphasized cognitive objectives within the Piagetian framework since she finds these to be the most inclusive and organized set of objectives. Piaget's framework involves physical knowledge and social knowledge, logical knowledge and representation. According to Piaget a child can obtain his physical, social and logical knowledge from different sources. The child obtains his physical knowledge from feedback from objects, and his social knowledge from feedback from people. These are external sources for a child.

The child then constructs his cognitive structure the reorganization of his mental schemata via the process of assimilation and accomodation. The third type of knowledge which is called logical knowledge is divided into logico-mathematical and spatio-temporal types. Finally representation occurs through the manipulation of symbols which is involved in language development. A child can build his cognitive structure using all of these knowledges. The emphasis on objectives related to cognitive development is reinforced by their importance in schooling.

### III. Objectives related to Language Development

There is a relationship between objectives related to language development and those related to cognitive development (Cazden in Bloom et al., 1971). Cazden states that specific language objectives must be combined with objectives related to cognitive development (Cazden in Bloom et al., 1971). Kamii also shares this point of view on the relation between language and cognition (Kamii in Bloom et al., 1971). Language objectives are divided into two categories by Cazden as cognitive objectives and affective objectives of language development (Cazden in Bloom et al., 1971). Cazden states that the function of cognitive objectives in language development as "to increase the child's ability to produce and comprehend the medium of oral language for a widening variety of purpose" (Cazden in Bloom et al., 1971, p.363). She states

the function of the affective component of language development as the frequent and effective use of language with enjoyment. Cazden used the term "competence" rather than "performance" for the purpose of defining affective functioning (Cazden in Bloom et al., 1971).

#### IV. Objectives related to Socio-Emotional Development

Socio-emotional development is considered as not only important for affective development but also for cognitive development by Kamii. Socio-emotional development takes place under three domains of interactions. These include teacher-child, peer-child, and child-task/activity relationships (Kamii in Bloom et al., 1971).

The preschool objectives which are emphasized within the scope of these different programs are the same objectives that the instrument Formative Evaluation For Preschool Objectives (Yildiran, 1978) is based on. Hence the survey of literature about preschool programs indicate the relevance of the objectives tapped by the instrument. This instrument is broadly based on these four categories of objectives which are discussed above.

In the next chapter of this study, information about this instrument will be broadly explained. The methodology of this study will be discussed in the next chapter.

### III. METHODOLOGY

In this chapter of the study the description of the sample, the description of the instrument, research design and procedures, and the concern of the study will be presented. The analysis of the data will follow the above sections.

#### The Description of the Sample

The subjects of this study were selected from the Center for Preschool Education of Bogaziçi University (BU) which accepts only the children of the personnel of BU. Fifty children both boys and girls (20 boys, 30 girls) between 3 to 5 years of age attend this center. These children are separated into three groups according to their age level. The first group consists of 17 children who are between 3 years and 3 years 11 months of age. The second group consists of 15 children who are around 4 years of age. The third group includes 18 children who are around 5 years and 5 years 11 months of age.

The sample of this study which consists of 10 children

from the 3 year age group and 10 children from the 5 year age group were selected by employing the random, equal, element, unstratified, single phase sampling method. Random assignment of subjects to the experimental and control groups were obtained by drawing names. There are 5 children in the 3 year-old age group who are in the experimental group and another 5 in the control group. The 5 year-olds are divided into the experimental and control groups comprised of 5 children each.

#### The Description of the Instrument

The instrument used in the study is Formative Evaluation For Preschool Objectives<sup>(1)</sup> which was developed by Güneş Yıldıran in 1978. The instrument was translated into Turkish as Okul Öncesi Hedeflerine Dönük İzleyici Değerlendirme in 1982. This is the first time it is being tried on a Turkish sample.

The instrument can be defined as an observational, criterion referenced, evaluation device. It is aimed at enabling the preschool teachers to find out the child's level of functioning on accepted preschool objectives. Yıldıran states,

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(1) For a copy of the instrument both in Turkish and English see the Appendix A and B, p.67-91.



The aim of this instrument is not only to evaluate the child. The major purpose is rather to consider the objectives of preschool education and to teach the areas in which a particular child needs help. If a child scores below what would be expected for his age level on that objective, the teacher should make sure that the child receives help so that he can attain the specified objective. In this sense, the instrument is both an evaluative device as well as a teaching aid. (Yildiran, 1978).

This instrument should not be viewed in the same category as an I.Q. test. Yildiran states that it "gives the teacher maximum freedom to think of different examples with which to test the child on that particular objective as well as providing help for the child who is not responsive in a particular area" (Yildiran, 1978).

The four categories of objectives which are included in the instrument are; socio-emotional, perceptual-motor, cognitive, and language development. These categories have a consensus of support from preschool educators as objectives for preschool education.

The instrument is not interested in the measurement of a stable characteristics such as I.Q. The provision of teaching aids for the child who needs help is one of the important aims of the instrument.

The instrument consists of 165 items, each item relating to an objective.

Some objectives have more than one item. While items are evaluated through the observation of the child, other items are done through a face-to-face interaction with the child. Some of these items are applied by using specific materials. These materials are those used daily by children. Different sets of materials can be used by the teacher.

The items of the instrument are evaluated on a 5 point Likert scale ranging from "very rarely" to "very often". Performance by all children on each item can be plotted on a separate sheet (See Appendix E, F, G and H, p.122-123-136-140.).

The following are some examples of the items in each scale:

#### SOCIO-EMOTIONAL DEVELOPMENT

##### Interaction Quality

|                                                             | 1           | 2      | 3         | 4     | 5          |
|-------------------------------------------------------------|-------------|--------|-----------|-------|------------|
| 4. The child is friendly and well received by other pupils. | /           | /      | /         | /     | /          |
|                                                             | very rarely | rarely | sometimes | often | very often |

#### PERCEPTUAL-MOTOR DEVELOPMENT

|                                                                                           | 1           | 2      | 3         | 4     | 5          |
|-------------------------------------------------------------------------------------------|-------------|--------|-----------|-------|------------|
| 23. The child is able to draw a line between two lines spaced a quarter of an inch apart. | /           | /      | /         | /     | /          |
|                                                                                           | very rarely | rarely | sometimes | often | very often |



\* The asterisked items must be administered in face-to-face interaction with the child. All other items may be assessed through unobtrusive observation of the child while he/she is engaged in other activities.

Example: Ask the child to "Take your pencil and go from one house to the other on this road. Go down the middle of the road. Keep your pencil on the road and do not get off the road."

#### I. COGNITIVE DEVELOPMENT

##### Physical knowledge

|                                                                                                       |             |        |           |        |            |
|-------------------------------------------------------------------------------------------------------|-------------|--------|-----------|--------|------------|
| 24. The child knows which objects in his environment break, roll, stretch, crumble, tear, and bounce. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                                                                       | very rarely | rarely | sometimes | often  | very often |

Example: Glass jar, wheel, rubber band, piece of paper, cookie, ball.

#### IV. LANGUAGE DEVELOPMENT

##### Understand and produce elaborated language

##### 37. Describe

|                                                                                                                                              |             |        |           |        |            |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------|-----------|--------|------------|
| *A. The child recognize the description of an object by choosing the correct picture corresponding to that description among other pictures. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                                                                                                              | very rarely | rarely | sometimes | often  | very often |

|                                                 |             |        |           |        |            |
|-------------------------------------------------|-------------|--------|-----------|--------|------------|
| *B. The child describes an object in a picture. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                 | very rarely | rarely | sometimes | often  | very often |

#### Research Design and Procedures

An experimental research method, the pretest-posttest control group design, was used in this study.

The procedures were implemented according to the following steps:

The first step involved the random assignment of subjects to experimental and control groups for each age group (3 and 5 year olds). These groups are listed below:

Group  $E_1$  : The experimental group of 3 year-olds.

Group  $C_1$  : The control group of 3 year olds.

Group  $E_2$  : The experimental group of 5 year-olds.

Group  $C_2$  : The control group of 5 year-olds.

Each group consists of 5 children.

The second step involved the administration of the instrument Formative Evaluation For Preschool Objectives to the all groups ( $E_1$ ,  $C_1$ ,  $E_2$ ,  $C_2$ ) as a pre-test measure.

During the third step the treatment/training was administered only to the experimental groups ( $E_1$ ,  $E_2$ ). Children in the control groups ( $C_1$  and  $C_2$ ) did not receive any treatment/training on the objectives. For 2 months (8.April - 8.June) children in the experimental groups ( $E_1$  and  $E_2$ ) were trained by their teachers and the researcher on objectives with which they had difficulty. All training was supervised by the researcher. The training was not limited to specified time periods.

Finally, when the training was over, the same instrument Formative Evaluation For Preschool Objectives was administered to the all groups ( $E_1$ ,  $C_1$ ,  $E_2$ ,  $C_2$ ) as a post-test measure.

### The Concern of the Study

In this section, information about the interjudge reliability of the instrument will be followed by the formulation of hypotheses and their operational definitions.

To measure the interjudge reliability of the instrument between 2 independent judges four steps were followed:

1. The by-person interjudge reliability of the four scales were measured by 2 independent judges by obtaining the percentage of concordance on the total number of items for each scale per child.

2. The average interjudge reliability for each of the four scales was obtained by adding each child's reliability for that particular scale and dividing it by the number of children.

3. Each child's total scale interjudge reliability was obtained by adding that particular child's reliability for each of the four scales and dividing it by the number of scales.

4. The total scale average interjudge reliability was obtained by taking the average of the reliabilities of each of the four scales.

The hypotheses of the study were that the effect of maturation and treatment on the objectives objectives tapped by the instrument.

Naturally, each child grows and matures within time. It is expected that each child learns something due to the maturation process. Thus the first hypothesis was formulated as:

HYPOTHESIS 1: The post-test scores of children will be higher than their pre-test scores after a 2 months period of time.

The independent variable of the hypothesis is the time period (2 months) between the pre and post evaluation of children. The dependent variable is the performance of the child on the instrument. The time period between the pre and post-tests was around 2 months measured by two sequential calendar months. The performance of the child was evaluated by the scores of the child on the total instrument as well as its sub-sections.

The second hypothesis was also related to the time/maturation variable. It can be stated as:

HYPOTHESIS II: Older children will score higher on the instrument than younger children.

The independent variable of the hypothesis is the two different age groups. The dependent variable of this hypothesis is again the performance of the two groups on the instrument. The two different age groups; as mentioned before, half of the sample consisted of 3 year-olds, the other half of 5

year-olds. Children's chronological age was computed at the time they were evaluated on the pre and post-tests of the instrument. The birth date of each child was obtained at the Center for Preschool Education of Bogaziçi University.

Training given to children during their early childhood seems to increase their performance levels (Hunt, 1961; Bloom, 1966; Heber, 1976). One of the aims of this instrument is to help the teacher in finding out where the child is in relation to preschool objectives, so that she/he can facilitate to help the child's development in that area. The third hypothesis of this study is related to the effects of training on children's performance. This hypothesis can be stated as:

HYPOTHESIS III: The trained children in each age group will score higher on the instrument than their un-trained counterparts.

The independent variable of the hypothesis is the training of the child. The dependent variable is again the performance on the instrument. Training of the child consisted of aids given to the child on items and their related objectives of the instrument on which the child scored below the average for his age group.

### The Analysis of Data

The interjudge reliability of the study was obtained after the administration of the instrument to the all subjects as a pre-test measure (See Appendix J and K, p.150-156.) .

The extent of agreement between judges was provided by determining the:

1. By-person interjudge reliability for each of the 4 scales.
2. Average total interjudge reliability for each of the 4 scales.
3. Each child's total scale interjudge reliability.
4. Total scale average interjudge reliability.

The statistical analyses of data were obtained by using the comparison of the means through t-tests.

In the analysis for the first hypothesis, the means of the experimental and the control groups on the pre-tests were compared with their means on the post-tests for the two age groups. In addition, each age groups' pre-test mean was compared with its post-test mean.

For the second hypothesis, the means of the 5 year-olds on the pre-test were compared with the means of the 3 year-olds. The same analysis was done for the post-test.



Finally, to test the effect of the treatment procedure, the difference in the pre-post means for the experimental and the control group was compared via independent group t-tests.

In the chapter following, the results of the study will be presented.

## IV. RESULTS

In this chapter of the study, the evaluation of the interjudge reliability of the study will be discussed first. This will be followed by the presentation of each hypothesis and its statistical testing.

### The Evaluation of the Interjudge Reliability of the Study

As mentioned in the previous chapter, the interjudge reliability of the study was calculated after the first administration of the instrument to the two age groups (3 and 5 year-olds). The interjudge reliability of the study<sup>(1)</sup> was obtained by determining:

- 1- By-person interjudge reliability for each of the four scales.
- 2- Average total interjudge reliability for each of the 4 scales.
- 3- Each child's total scale interjudge reliability.
- 4- Total scale average interjudge reliability.

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(1) See the Appendix, J. and K., p. 150-156.

TABLE 1- THE INTERJUDGE RELIABILITY OF THE INSTRUMENT FOR THE 3 YEAR-OLDS

|                                               | By-Person Interjudge Reliability of Each of the 4 Scales |                      |                |              | Each Child's<br>Total Scale<br>Interjudge<br>Reliability |
|-----------------------------------------------|----------------------------------------------------------|----------------------|----------------|--------------|----------------------------------------------------------|
|                                               | I. SOCIO<br>EMOTIONAL                                    | II. PERCEPTUAL-MOTOR | III. COGNITIVE | IV. LANGUAGE |                                                          |
| Child 1                                       | % 100                                                    | % 100                | % 95           | % 100        | % 98.7                                                   |
| Child 2                                       | 95                                                       | 100                  | 96             | 100          | 97.7                                                     |
| Child 3                                       | 100                                                      | 100                  | 100            | 100          | 100                                                      |
| Child 4                                       | 95                                                       | 100                  | 97             | 92           | 96                                                       |
| Child 5                                       | 100                                                      | 100                  | 100            | 100          | 100                                                      |
| Child 6                                       | 95                                                       | 100                  | 100            | 100          | 98.7                                                     |
| Child 7                                       | 100                                                      | 100                  | 100            | 100          | 100                                                      |
| Child 8                                       | 100                                                      | 100                  | 98             | 100          | 99.5                                                     |
| Child 9                                       | 95                                                       | 83                   | 100            | 100          | 94.5                                                     |
| Child 10                                      | 100                                                      | 83                   | 100            | 100          | 95.7                                                     |
| Average<br>total<br>interjudge<br>reliability | 98                                                       | 96.6                 | 98.6           | 99.2         | 98.1                                                     |

Table 1 shows that the by-person reliability is very high, the average reliability for each of the scales ranging from 96.6% to 99.2%. The table further shows that each child's total scale reliability ranges from 94.5% to 100%. The total scale reliability of the instrument for 3 year - olds is 98.1%.

Table 2 shows the same analysis on the interjudge

reliability for the 5 year-olds.

TABLE 2- THE INTERJUDGE RELIABILITY OF THE INSTRUMENT FOR THE 5 YEAR-OLDS

|                                               | By-Person Interjudge Reliability of Each of the 4 Scales |                      |                |              | Each Child's<br>Total Scale<br>Interjudge<br>Reliability |
|-----------------------------------------------|----------------------------------------------------------|----------------------|----------------|--------------|----------------------------------------------------------|
|                                               | I. SOCIO<br>EMOTIONAL                                    | II. PERCEPTUAL-MOTOR | III. COGNITIVE | IV. LANGUAGE |                                                          |
| Child 1                                       | % 100                                                    | % 100                | % 98           | % 100        | % 99.5                                                   |
| Child 2                                       | 100                                                      | 100                  | 97             | 100          | 99.2                                                     |
| Child 3                                       | 95                                                       | 100                  | 100            | 100          | 98.7                                                     |
| Child 4                                       | 95                                                       | 100                  | 98             | 100          | 98.2                                                     |
| Child 5                                       | 95                                                       | 100                  | 98             | 100          | 98.2                                                     |
| Child 6                                       | 91                                                       | 100                  | 100            | 100          | 97.7                                                     |
| Child 7                                       | 95                                                       | 100                  | 100            | 100          | 98.7                                                     |
| Child 8                                       | 95                                                       | 100                  | 100            | 100          | 98.7                                                     |
| Child 9                                       | 100                                                      | 100                  | 100            | 96           | 99                                                       |
| Child 10                                      | 95                                                       | 100                  | 100            | 96           | 97.7                                                     |
| Average<br>Total<br>Interjudge<br>Reliability | 96.1                                                     | 100                  | 99.1           | 99.2         | 98.5                                                     |

Table 2 shows that the by-person reliability is very high, the average interjudge reliability for each of the scales ranging from 96.1 to 100%. The table further shows that each child's total scale interjudge reliability ranges from 97.7% to 99%. The total scale interjudge reliability of

the instrument for the 5 year-olds is 98.5%.

### The Statistical Testing of Each Hypothesis of the Study

In this section, each hypothesis and its statistical analysis will be presented.

In this study, t-tests are used for the statistical analysis of the data for all hypotheses.

The first hypothesis of the study deals with the effect of maturation through time for each child. It is expected that each child will perform better at a future point in time than she/he had earlier.

The first hypothesis of the study can be stated as:

HYPOTHESIS 1: THE POST-TEST SCORES OF CHILDREN WILL BE HIGHER  
THAN THEIR PRE-TEST SCORES AFTER A 2 MONTHS  
PERIOD OF TIME .

For this hypothesis, the means of the control and experimental groups on the pre-tests are compared with their means on the post-tests for the two age groups. The pre-test mean of each age group was compared with the post-test means. It was expected that the post-test means of the experimental group would be higher than their pre-test means for both age groups.

The same results are also expected for the control group of both ages. The expected results could be formulated as(1):

- 1-  $E_1$ , Pre  $<$   $E_1$ , Post
- 2-  $C_1$ , Pre  $<$   $C_1$ , Post
- 3-  $E_2$ , Pre  $<$   $E_2$ , Post
- 4-  $C_2$ , Pre  $<$   $C_2$ , Post

Table 3 shows the comparison of the 3 year-old experimental group means of the pre and post-test results.

TABLE 3- THE COMPARISON OF THE MEANS OF THE PRE AND POST-TESTS OF THE 3 YEAR-OLDS FOR THE EXPERIMENTAL GROUP USING DEPENDENT SAMPLES

|         | Pre-test, $E_1$ | Post-test, $E_1$ | t Value       |
|---------|-----------------|------------------|---------------|
| Means   | 3.86            | 4.15             | $t_4 = 79.11$ |
| St.Dev. | .324            | .255             | $p = .001$    |
| Numbers | 5               | 5                |               |

This table shows that the post-test means of the 3 year-old experimental group is significantly higher at the .001 level than their pre-test means.

Table 4 shows the same analysis for the 3 year-old control group.

- 
- (1) 1-  $E_1$  stands for the treatment group of 3 year-olds  
2-  $C_1$  stands for the control group of 3 year-olds  
3-  $E_2$  stands for the treatment group of 5 year olds  
4-  $C_2$  stands for the control group of 5 year olds

TABLE 4- THE COMPARISON OF THE MEANS OF THE PRE AND POST - TESTS OF THE 3 YEAR-OLDS FOR THE CONTROL GROUP USING DEPENDENT SAMPLES

|         | Pre-test, C <sub>2</sub> | Post-test, C <sub>1</sub> | t Value       |
|---------|--------------------------|---------------------------|---------------|
| Means   | 3.85                     | 3.99                      | $t_4 = 7.087$ |
| St.Dev. | .404                     | .417                      | $p = .01$     |
| Numbers | 5                        | 5                         |               |

This table shows that the control group which had no training also shows significant differences between the pre and post-tests at the .01 level probably due to developmental and pre-test learning effects.

Similar results due to maturation were obtained for the 5 year-olds. Table 5 show the comparison of the means of the pre and post-test, of the 5 year-olds using dependent samples for the experimental group of this age.

TABLE 5- THE COMPARISON OF THE PRE AND POST-TEST MEANS OF THE 5 YEAR-OLD EXPERIMENTAL GROUP USING DEPENDENT SAMPLES

|         | Pre-test, E <sub>2</sub> | Post-test, E <sub>2</sub> | t Value      |
|---------|--------------------------|---------------------------|--------------|
| Means   | 4.45                     | 4.67                      | $t_4 = 5.69$ |
| St.Dev. | .191                     | .176                      | $p = .01$    |
| N       | 5                        | 5                         |              |

The results indicate that the post-test mean of the 5 year-old experimental group significantly higher than the

pre-test mean at the .01 level.

Table 6 shows the same comparison for the control group of 5 year-olds.

TABLE 6- THE COMPARISON OF THE MEANS OF PRE AND POST-TESTS OF THE 5 YEAR-OLDS FOR THE CONTROL GROUP USING DEPENDENT SAMPLES

|          | Pre-test, C <sub>2</sub> | Post-test, C <sub>2</sub> | t Value        |
|----------|--------------------------|---------------------------|----------------|
| Means    | 4.74                     | 4.80                      | $t_4 = 10.689$ |
| St. Dev. | .066                     | .051                      | $p = .001$     |
| Numbers  | 5                        | 5                         |                |

This table shows that the post-test means of the control group is significantly higher than the pre-test means for the 5 year-old control group.

In light of all this evidence, the first hypothesis of the study is substantiated.

The second hypothesis of the study deals with the cross-sectional evidence of the effect of development at two different ages.

The second hypothesis can be stated as:

HYPOTHESIS 11: OLDER CHILDREN WILL SCORE HIGHER ON THE INSTRUMENT THAN YOUNGER CHILDREN.



For this hypothesis the total group of 3 year-olds were compared with the total group of 5 year-olds on their pre-test means. In addition, the same analysis was done for their post-test means. Further more the post-test means the 3 year-old experimental group were compared with the post-test means of the 5 year-old experimental group. The same analysis was done for the post-test control group means. The expected results can be formulated as:

1.  $E_1 + C_1 \cdot \text{Pre} < E_2 + C_2 \cdot \text{Pre}$
2.  $E_1 + C_1 \cdot \text{Post} < E_2 + C_2 \cdot \text{Post}$
3.  $E_1 \cdot \text{Post} < E_2 \cdot \text{Post}$
4.  $C_1 \cdot \text{Post} < C_2 \cdot \text{Post}$
5.  $E_1 \cdot \text{Post} < C_2 \cdot \text{Pre}$

Table 7 shows the comparison of the mean of all of the 3 year-olds with the mean of the 5 year-olds on the pre-test using independent samples.

TABLE 7- THE COMPARISON OF THE MEANS OF THE 3 YEAR-OLD TOTAL GROUP WITH THE 5 YEAR-OLD TOTAL GROUP ON THE PRE-TEST USING INDEPENDENT SAMPLING

|         | Pre-test Total<br>3 year - olds | Pre-test Total<br>5 year - olds | t value         |
|---------|---------------------------------|---------------------------------|-----------------|
| Means   | 3.86                            | 4.59                            | $t_{19} = 5.40$ |
| St.Dev. | .377                            | .204                            | $p = .001$      |
| Numbers | 10                              | 10                              |                 |

Table 7 shows that the 5 year-olds as a total group (inclusive of both the experimental and control group) before

treatment score significantly higher at the .001 level than the total 3 year-old group on the pre-test.

Table 8 shows the comparison of the mean of all of the 3 year-olds with the mean of all of the 5 year-olds on the post-test using independent samples.

TABLE 8- THE COMPARISON OF THE MEANS OF THE 3 YEAR-OLD TOTAL GROUP WITH THE 5 YEAR-OLD TOTAL GROUP ON THE POST-TEST USING INDEPENDENT SAMPLES

|         | Post-test Total<br>3 year-olds | Post-test Total<br>5 year-olds | $t$ value       |
|---------|--------------------------------|--------------------------------|-----------------|
| Means   | 4.07                           | 4.74                           | $t_{18} = 5.98$ |
| St.Dev. | .330                           | .139                           | $p = .001$      |
| Numbers | 10                             | 10                             |                 |

This table shows that the 5 year-olds score significantly higher at the .001 level on the post-test in comparison to the 3 year-old total group.

Table 9 shows the comparison of the means of the post-test of the 3 year-old experimental group with the 5 year-old experimental group using independent samples.

TABLE 9- THE COMPARISON OF THE MEANS OF THE 3 YEAR-OLD EXPERIMENTAL GROUP WITH THE 5 YEAR-OLD EXPERIMENTAL GROUP ON THE POST-TESTS USING INDEPENDENT SAMPLES

|         | Post E <sub>1</sub> | Post E <sub>2</sub> | t value       |
|---------|---------------------|---------------------|---------------|
| Means   | 4.15                | 4.67                | $t_8 = 3.768$ |
| St.Dev. | .255                | .176                | $p = .01$     |
| Numbers | 5                   | 5                   |               |

This table show that the 5 year-old experimental group mean is significantly higher at the .01 level on the post-test in comparison to the 3 year-old experimental group.

To further test this hypothesis, a comparison was made between the 3 year-old control group and the 5 year-old control group on the post-test means using independent samples.

Table 10 shows this analysis. It is expected that  $C_1.Post > C_2.Post$ .

TABLE 10- THE COMPARISON OF THE MEANS OF THE 3 YEAR-OLD CONTROL GROUP WITH THE 5 YEAR-OLD CONTROL GROUP ON THE POST-TEST MEANS USING INDEPENDENT SAMPLES

|         | Post C <sub>1</sub> | Post C <sub>2</sub> | t value       |
|---------|---------------------|---------------------|---------------|
| Means   | 3.99                | 4.80                | $t_8 = 4.308$ |
| St.Dev. | .417                | .0512               | $p = .01$     |
| Numbers | 5                   | 5                   |               |

This table shows that 5 year-old control group scores significantly higher at the .01 level on the post-test in comparison to the 3 year-old control group.

To further test this hypothesis, a comparison was made between the post-test means of the 3 year-old experimental group which had training with the means of the pre-test of the 5 year-old control group which had no training at all.

If the means of the 5 year-old untrained group are higher than the trained 3 year-old group, this would indicate that there are developmental differences between the two age groups which can not be accounted for by training alone.

Table 11 Shows this analysis. It is expected that<sup>(1)</sup>

$$E_1.\text{Post} < C_2.\text{Pre}.$$

TABLE 11- THE COMPARISON OF THE POST-TEST MEANS OF THE 3 YEAR-OLD EXPERIMENTAL GROUP WITH THE PRE-TEST MEANS OF THE 5 YEAR-OLD CONTROL GROUP USING INDEPENDENT SAMPLES

|         | Post-Test<br>$E_1$ | Pre-Test<br>$C_2$ | $t$ value     |
|---------|--------------------|-------------------|---------------|
| Means   | 4.15               | 4.74              | $t_8 = 5.043$ |
| St.Dev. | .255               | .066              | $p = .001$    |
| Numbers | 5                  | 5                 |               |

(1)  $E_1$  stands for the trained 3 year-olds

$C_2$  stands for the un-trained 5 year-olds.

This table shows that in spite of training, the 3 year-olds score significantly less on the post-test than do the un-trained 5 year-olds on their pre-test.

In light of this evidence, the second hypothesis of the study is substantiated.

The third hypothesis of the study deals with the effect of training/treatment on children's performance. It is expected that children's performance level will increase due to training in the experimental groups. The third hypothesis of the study can be stated as:

HYPOTHESIS III: The trained children in each age group will score higher on the instrument than their un-trained counter parts.

Assuming that the experimental and control groups do not differ significantly on their pre-test scores, it is logical to compare the mean of the experimental group with the control group on the post-test for both age groups. The expected results would then, be formulated as:

1.  $E_1.Post > C_1.Post$
2.  $E_2.Post > C_2.Post$

For the 3 year-olds, there are no significant differences in the means of the experimental and control groups on the pre-test. Hence their post-test means are compared.

Table 12 shows the comparison of the post-test means of the experimental and control groups of 3 year-olds.

TABLE 12- THE COMPARISON OF THE POST-TEST MEANS OF THE EXPERIMENTAL AND CONTROL GROUPS OF 3 YEAR-OLDS USING INDEPENDENT SAMPLES

|         | Post-test<br>E <sub>1</sub> | Post-test<br>C <sub>1</sub> | t value               |
|---------|-----------------------------|-----------------------------|-----------------------|
| Means   | 4.15                        | 3.99                        | t <sub>8</sub> = .731 |
| St.Dev. | .255                        | .417                        | N.S.                  |
| Numbers | 5                           | 5                           | p. = .30              |

This table shows that there are no significant differences between the post-test means of the experimental and control groups of 3 year-olds.

The same analysis, however, seemed inappropriate for the 5 year-olds. Since the experimental and control groups differed significantly from each other favoring the control group on the pre-test, to compare their post-test means would not have been an appropriate statistical analysis. Table 13 shows the differences of the means on the pre-test between the experimental and control groups of 5 year-olds.

TABLE 13- THE COMPARISON OF THE PRE-TEST MEANS OF THE EXPERIMENTAL AND CONTROL GROUPS OF 5 YEAR-OLDS USING INDEPENDENT SAMPLES

|         | Pre - test<br>E <sub>2</sub> | Pre - test<br>C <sub>2</sub> | t value                          |
|---------|------------------------------|------------------------------|----------------------------------|
| Means   | 4.45                         | 4.74                         | t <sub>8</sub> = 3.25<br>p = .02 |
| St.Dev. | .191                         | .066                         |                                  |
| Numbers | 5                            | 5                            |                                  |

This table shows that on the pre-test means the two groups differed significantly at the .02 level, favoring the control group.

Table 14 shows that the post-test means of the experimental and control groups are not significantly different from each other.

TABLE 14- THE COMPARISON OF THE POST-TEST MEANS OF THE EXPERIMENTAL AND CONTROL GROUPS OF 5 YEAR-OLDS USING INDEPENDENT SAMPLES

|         | Post-test<br>E <sub>2</sub> | Post-test<br>C <sub>2</sub> | t value                       |
|---------|-----------------------------|-----------------------------|-------------------------------|
| Means   | 4.67                        | 4.30                        | t <sub>8</sub> = 1.58<br>N.S. |
| St.Dev. | .176                        | .0512                       |                               |
| Numbers | 5                           | 5                           |                               |

Table 14 shows that the means of the experimental and control groups do not differ significantly from each other. However, this result does not give any information about the effect of treatment since on the pre-test measure these 2 groups differed significantly.

As discussed on Table 5, the post-test mean of the experimental group is significantly higher than the pre-test mean at the .01 level of significance (See Table 5, p. 42).

Similarly Table 6 shows that the post-test mean of the control group is significantly higher than the pre-test mean at the .001 level of significance (See Table 6, p. 43). This is to say that both the experimental and the control groups gained significantly through the 2 months time-period. Since maturation may be a cause of this gain, these tables do not give us information about the effect of treatment.

It was then logical to look at the mean difference scores between the experimental and control groups. If this difference is significant, it may indicate that there may be a treatment effect.

Table 15 shows this analysis.

TABLE 15- THE MEAN DIFFERENCES BETWEEN THE PRE AND POST-TESTS OF EXPERIMENTAL AND CONTROL GROUPS OF 5 YEAR-OLDS

|         | Pre-Post Mean<br>Differences of E <sub>2</sub> | Pre-Post Mean<br>Differences of C <sub>2</sub> | t Value       |
|---------|------------------------------------------------|------------------------------------------------|---------------|
| Means   | .22                                            | .06                                            | $t_8 = 4.324$ |
| St.Dev. | .082                                           | .023                                           | $p = .01$     |
| Numbers | 5                                              | 5                                              |               |



This table shows that the mean differences of the experimental group is significantly higher than the control group at the .01 level.

This analysis assumes that there was no interaction between the pre-test and treatment.

Further, t-tests are not usually used for samples of less than 30 individuals. Finally, it must be remembered that the use of multiple t-tests without raising the significance level may be questioned. Still the fact that the difference is significant at the .01 level is encouraging. Though we may not to say that the third hypothesis is unconditionally supported, there is indicative evidence in the 5 year-old group that the treatment has an effect.

The following table shows the pre and post-test means of the 3 and 5 year-olds for each scale giving the overall mean for each scale, in addition to the means of the experimental and control groups for each scale.

TABLE 16- PRE AND POST-TEST MEANS OF THE TOTAL GROUPS AS WELL AS THE EXPERIMENTAL AND CONTROL GROUPS OF 3 AND 5 YEAR-OLDS ON EACH OF THE FOUR SCALES OF THE INSTRUMENT

| Scales                              | 3-year olds           |                       |                       | 5-year olds           |                       |                       |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                     | Average<br>x          | E <sub>1</sub>        | C <sub>1</sub>        | Average<br>x          | E <sub>2</sub>        | C <sub>2</sub>        |
| I. SOCIO-EMOTIONAL<br>DEVELOPMENT   | 3.85 Pre<br>4.15 Post | 4.03 Pre<br>4.38 Post | 3.67 Pre<br>3.92 Post | 4.18 Pre<br>4.41 Post | 3.93 Pre<br>4.32 Post | 4.44 Pre<br>4.51 Post |
| II. PERCEPTUAL-MOTOR<br>DEVELOPMENT | 4.66 Pre<br>4.92 Post | 4.76 Pre<br>4.97 Post | 4.56 Pre<br>4.87 Post | 5 Pre<br>5 Post       | 5 Pre<br>5 Post       | 5 Pre<br>5 Post       |
| III. COGNITIVE<br>DEVELOPMENT       | 3.92 Pre<br>4.14 Post | 3.84 Pre<br>4.16 Post | 4.00 Pre<br>4.12 Post | 4.78 Pre<br>4.88 Post | 4.70 Pre<br>4.86 Post | 4.87 Pre<br>4.90 Post |
| IV. LANGUAGE<br>DEVELOPMENT         | 3.62 Pre<br>3.55 Post | 3.54 Pre<br>3.70 Post | 3.29 Pre<br>3.60 Post | 4.19 Pre<br>4.44 Post | 3.90 Pre<br>4.22 Post | 4.48 Pre<br>4.66 Post |
| I                                   | 3.96 Pre<br>4.19 Post | 4.04 Pre<br>4.30 Post | 3.88 Pre<br>4.07 Post | 4.53 Pre<br>4.68 Post | 4.38 Pre<br>4.60 Post | 4.69 Pre<br>4.76 Post |

For the 3 year-old total group, the biggest gain is on the cognitive development scale, and the lowest is on the language development scale. The biggest gains for the 3 year-old experimental group occurs on the socio-emotional development scale and the lowest on the language development scale. For the 3 year-old control group, the biggest gain occurs on the perceptual-motor development scale and the lowest on the language development scale.

For the 5 year-old total group there is no gain on the perceptual-motor development scale, they reach the ceiling both on the pre and post-tests. The largest gain is on the language development scale and the smallest is on the cognitive development scale. For the 5 year-old experimental group, the biggest gain is on the socio-emotional development scale and the lowest is on the cognitive development scale. Again there are no gains on the perceptual-motor development scale due to ceiling effect. For the control group of 5 year-olds, the biggest gain is on the language development scale and the lowest is on the cognitive development scale.

For both age groups, the experimental groups show bigger gains than the control groups for the total instrument (See Appendix I, p.146).

The following chapter will deal with the summary of the study and the discussion of the results.

## V. SUMMARY AND DISCUSSION

In this chapter of the study, the summary and the discussion of the results and the limitations of the study will be presented. In addition, the recommendations for further research will be presented.

### Summary and Discussion

The aim of this study includes the investigation of the interjudge reliability of the instrument and the testing of its construct validity. The instrument's construct validity was tested by examining whether or not the level of functioning on the objectives is effected by children's development. In addition, the effect of training on children's performance was investigated.

The instrument used in this study is Formative Evaluation For Preschool Objectives which was developed by Güzver Yildiran in 1978. The instrument was translated into Turkish as Okul Öncesi Hedeflerine Dönük İzleyici Değerlendirme. This instrument can be defined as an observational, criterion referenced, evaluation device. It is aimed at enabling the

preschool teachers to find out the children's level of functioning on accepted preschool objectives. The aim of this instrument is not only to evaluate the child but also to help the child in areas where his learning is not complete. The global objectives of the instrument are separated into four categories as:

1. Socio-Emotional Development
2. Perceptual-Motor Development
3. Cognitive Development
4. Language Development.

For the realization of this study, the project was designed as an experimental research. The subjects of the study were selected from the Center for Preschool Education of Bogaziçi University. Half of the sample consisted of 3 year-olds and the other half consisted of 5 year-olds. The selected subjects from each age groups were also separated into two groups as experimental and control groups. Each group consisted of 5 children. These groups were stated as:

1.  $E_1$ : 5 children in the experimental group of 3 year-olds.
2.  $C_1$ : 5 children in the control group of 3 year-olds.
3.  $E_2$ : 5 children in the experimental group of 5 year-olds.
4.  $C_2$ : 5 children in the control group of 5 year-olds.

In the study there are 10 children in the 3 year-old range and 10 others in the 5 year-old range.

The first step of the study involved the administration of the instrument to all children. Then only the children in the experimental groups for both age levels were trained for 2 months. Finally, when the training was over, the same instrument was administered to all of the children.

Results of the study will be summarized and discussed in the section below:

The interjudge reliability of the instrument was determined after the first administration to both age groups. The interjudge reliability of the instrument was done between the two independent judges. The results show that the interjudge reliability of the instrument is high for both age groups.

Results of the study related to each hypothesis will be presented below:

The first hypothesis of the study deals with the effect of maturation through time for each child. The first hypothesis could be stated as:

HYPOTHESIS 1: The post-test scores of children will be higher than their pre-test scores after a 2-months period of time.

The statistical analysis of the results related to the first hypothesis shows that the post-test scores of children in both age groups are significantly higher than their pre-test scores after a 2-months period of time. Significant differences between the post-test and pretest scores, favoring the post-test were found in each group. Thus, the first hypothesis of the study is substantiated.

The second hypothesis of the study deals with the cross-sectional evidence of the effect of development between different age groups. The second hypothesis could be stated as:

HYPOTHESIS II: Older children will score higher on the instrument than younger children.

For this hypothesis, the total group of 3 year-olds was compared with the total group of 5 year-olds on their pre-test means. The same analysis was done for their post-test means. The results show that the 5 year-olds performed significantly higher on the instrument than 3 year-olds. In addition, the post-test means of the 3 year-olds were compared with the 5 year-olds. The same analysis was done for the control groups.

The results show that the older children under both conditions score significantly higher than the younger ones.

A further analysis was the comparison of the post-test means of the 3 year-old experimental group with the pre-test

means of the 5 year-old control group. Even though the older children had no training at the beginning of the study, still they scored significantly higher than the 3 year-olds who had training at the end of the study. This is a very strong evidence that older children do better even when they are not trained than younger children who are trained. This means that the instrument is quite sensitive to the differences in development.

The third hypothesis of the study deals with the effect of training on children's performance. The third hypothesis of the study could be stated as:

HYPOTHESIS III: The trained children in each age group will score higher on the instrument than their untrained counterparts.

For this hypothesis, the comparison of the post-test means of the experimental groups with those of the control groups for both age groups were done.

When these analyses were done, it is observed that there are no significant differences between the post-test means of the trained and untrained groups of both ages. Although these results suggest that the training had no effect on children's performance level, it seems that there was in fact a treatment effect for 5 year-olds. Because the means of pre tests of the experimental and the control groups of 5 year-olds were significantly different, favoring the control group, the mean



difference scores between the trained and untrained groups of 5 year-olds were analyzed. These results show that the mean difference between pre and post-test scores of the experimental group was significantly higher than for the mean differences of pre and post-test in the control group. This supports the conclusion of a treatment effect for 5 year-olds.

Briefly, the results show that construct validity, and interjudge reliability was obtained for the instrument. However, the training and learning effect is partially valid for only the 5 year-olds.

#### The Limitations of the Study and Recommendations for Further Research

This study was limited because of the time factor, since the duration of the treatment (2 months) seems not sufficient to obtain more significant results. If the duration of the training was longer and if the sample size was larger, than the results would be more efficient than are observed. Furthermore, the training that was done was not systematic.

In the third hypothesis which dealt with the effect of treatment, it was unfortunate that the control and experimental groups were not comparable to start with (the control group scored significantly higher on the pre-test). Secondly, there may have been a pretest-treatment interaction which resulted in the experimental groups' gains. However, there was no ceiling effect for the instrument. It is also possible that there may have been pretest-learning errors confounding.

developmental changes in the control groups. On the otherhand this is also possible for the experimental groups. The fact that the differences are at the .01 level is encouraging.

This study may be considered a pilot study which evaluates the interjudge reliability and the construct validity for Formative Evaluation For Preschool Objectives. Further research is needed for larger samples and longer periods using systematic treatment techniques to further elucidate the obtained results.

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## ROOSEVELT UNIVERSITY HEAD START TRAINING PROGRAM

### INTRODUCTION TO THE INSTRUMENT Formative Evaluation For Preschool Objectives

Güzver Yildiran

This is an observational instrument to help the teacher to find out the child's level of functioning. It is based on the objectives which are thought to be relevant and important for preschool educational programs (Bloom, Hastings, and Madaus, 1971)<sup>(1)</sup>. The aim of this instrument is not only to evaluate the child. The major purpose is rather to consider to objectives of preschool education and help the child in areas where his learning is not complete. If a child scores below what would be expected for his age level on that objective, the teacher should make sure that the child receives help so that he can attain the specified objective. In this sense, the instrument is both an evaluative device as well as a teaching aid.

The instrument deals with global objectives and gives the teacher maximum freedom to think of different examples with which to test the child on that particular objective as well as providing help for the child who is not responsive in a particular area. Some examples of instructional suggestions are given as an aid to the teacher. These are by far not exhaustive. Each teacher will think of different ways of intervening to aid a child in ways that are most appropriate for the individual child, after observing him at different times. In this sense the instrument is not similar to an I.Q. test or a test measuring the abilities of a child. Rather, it should be viewed as a teaching aid.

Two charts are provided to plot the profile of the whole class on a single sheet on each objective and each item relating to the objective (some objectives have more than one item). In addition, the individual profile of each student can be plotted on separate instruments.

It should be remembered that the objectives selected for this instrument have found the consensus of educators as well as different preschool programs. It is hoped that the teacher will view the instrument as an aid for teaching those things that are important to preschool education.

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(1) The objectives are selected from the book by Bloom, Hastings, and Madaus, Handbook on Formative and Summative Evaluation of Student Learning, McGraw-Hill, 1971, chapter 13 by Constance K. F. and chapter 14 by Courtney B. Cazden.



GÜZVER YILDIRAN\*

ROOSEVELT UNIVERSITY HEAD START TRAINING  
PROGRAM

FORMATIVE EVALUATION FOR PRESCHOOL OBJECTIVES

I. SOCIO - EMOTIONAL DEVELOPMENT

Relationship to the teacher

The child interacts  
with the teacher.

|                                                            |             |        |           |        |            |
|------------------------------------------------------------|-------------|--------|-----------|--------|------------|
| A. The child trusts<br>the teacher                         | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                            | very rarely | rarely | sometimes | often  | very often |
| B. The child initiates<br>interaction with<br>the teacher. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                            | very rarely | rarely | sometimes | often  | very often |
| C. The child seeks<br>teacher's approval.                  | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                            | very rarely | rarely | sometimes | often  | very often |
| D. The child uses the<br>teacher's behavior<br>as a model. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                            | very rarely | rarely | sometimes | often  | very often |

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Self-control

The child shows inner controls.

- |                                                     |             |        |           |        |            |
|-----------------------------------------------------|-------------|--------|-----------|--------|------------|
| A. The child is able to follow directions.          | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                     | very rarely | rarely | sometimes | often  | very often |
| B. The child pays attention.                        | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                     | very rarely | rarely | sometimes | often  | very often |
| C. The child does not require constant supervision. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                     | very rarely | rarely | sometimes | often  | very often |
| D. The child does not disrupt classroom procedures. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                     | very rarely | rarely | sometimes | often  | very often |

Reaction quantity

- |                                                                  |             |        |           |        |            |
|------------------------------------------------------------------|-------------|--------|-----------|--------|------------|
| The child is communicative to and interacts with other children. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                                  | very rarely | rarely | sometimes | often  | very often |

Reaction quality

- |                                                          |             |        |           |        |            |
|----------------------------------------------------------|-------------|--------|-----------|--------|------------|
| The child is friendly and well received by other pupils. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                          | very rarely | rarely | sometimes | often  | very often |
| The child shares things willingly.                       | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                          | very rarely | rarely | sometimes | often  | very often |
| The child accepts taking turns.                          | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                          | very rarely | rarely | sometimes | often  | very often |
| The child shows some leadership.                         | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                          | very rarely | rarely | sometimes | often  | very often |

Adaptation in school

- |                                                                    |             |        |           |        |            |
|--------------------------------------------------------------------|-------------|--------|-----------|--------|------------|
| The child appears to be comfortable and generally happy in school. | 1<br>/      | 2<br>/ | 3<br>/    | 4<br>/ | 5<br>/     |
|                                                                    | very rarely | rarely | sometimes | often  | very often |

Development motivation

The child initiates activities.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

The child persists until the task is done

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

The child does the task well.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

The child takes time to reflect in making decisions.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

Curiosity

The child asks questions.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

The child explores objects in his environment.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

The child asks information of the teacher.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

The child comes up with many different ideas in a given situation instead of relying on one correct answer.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

The child uses materials in a variety of ways.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

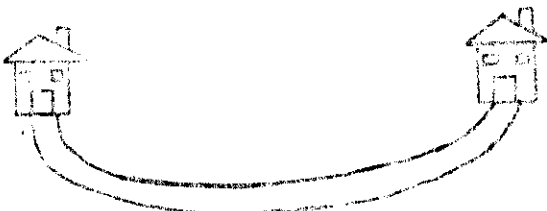
## II. PERCEPTUAL - MOTOR DEVELOPMENT

### gross motor coordination

5. The child is able to walk sideways on a tape on the floor which is four inches wide and eight feet long without stepping off.
- 1 2 3 4 5  
/ / / / /  
very rarely rarely sometimes often very often
6. The child is able to bread jump across a small object on the floor with both feet off the floor, landing on both feet.
- 1 2 3 4 5  
/ / / / /  
very rarely rarely sometimes often very often
7. The child is able to jump on one foot four or five times.
- 1 2 3 4 5  
/ / / / /  
very rarely rarely sometimes often very often

### fine motor coordination

8. The child is able to cut a paper in half with scissors where a line has been drawn. (Ask the child to "Cut the paper on the line")
- 1 2 3 4 5  
/ / / / /  
very rarely rarely sometimes often very often
9. The child is able to turn the pages of a book one by one after watching the teacher.
- 1 2 3 4 5  
/ / / / /  
very rarely rarely sometimes often very often
10. The child is able to draw a line between two lines spaced a quarter of an inch apart.
- 1 2 3 4 5  
/ / / / /  
very rarely rarely sometimes often very often



Example: Ask the child to "Take your pencil and go from one house to the other on this road. Go down the middle of the road. Keep your pencil on the road and do not get off the road".

The asterisked items must be administered in face-to-face interaction with the child. All other items may be assessed through unobtrusive observation of the child while engaged in play or other activities.

### III. COGNITIVE DEVELOPMENT

#### Physical knowledge

1. The child knows which objects in his environment break, roll, stretch, crumble, tear, and bounce.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

Example: Glass jar, wheel, rubber band, piece of paper, cookie, ball.

2. The child knows the names of the objects in his environment. (Pictures of the objects like umbrella, a candle, an ice-cream cone, a pencil, a lamp, a ball can be shown to the child).
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

3. The child knows the function of the objects in his environment. (The example above can be used).
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

#### Social knowledge

4. The child knows the roles of the people around him.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

Example: A doctor, a policeman, a teacher, a mother, a father.

#### Logical knowledge

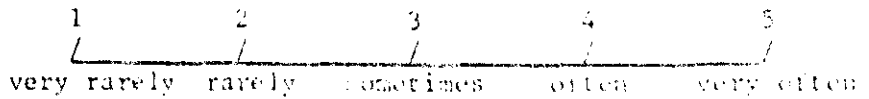
##### Classification

5. The child is able to classify objects according to color. (A big red square, a medium sized blue square, a small yellow square; a big yellow triangle, a medium sized red triangle, a small blue triangle;

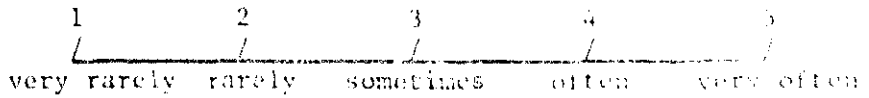
a big blue circle, a medium sized yellow circle, a small red circle, a small red circle can be used as materials).

The child is asked to do the following:

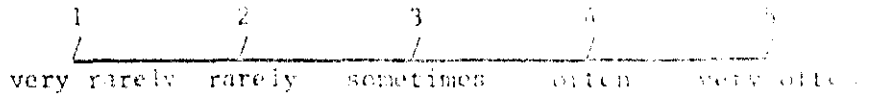
\*1) Place all the red object here.



\*2) Place all the blue object here.



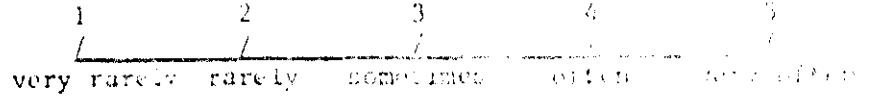
\*3) Place all the yellow object here.



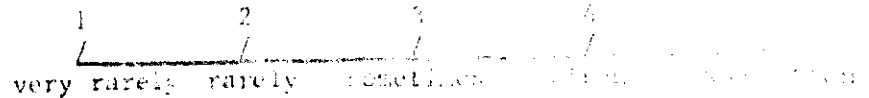
The child is able to classify objects according to their shapes. (The same objects as above can be used here).

The child is asked to do the following:

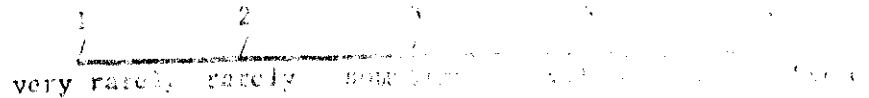
\*1) Place all the circles here.



\*2) Place all the squares here.



\*3) Place all the triangles here.



The child is able to classify objects according to size. (The same objects as above can be used here).

The child is asked to do the following:

\*1) Place the biggest objects here

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*2) Place the medium sized objects here.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*3) Place the smallest objects here.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

The child is able to classify animals according to certain characteristics.  
(Pictures of a cat, a dog, a horse, a cow, a sheep, a lion, an elephant, a monkey, a bird, a fish, a bee, a butterfly can be used).

The child is asked the following:

\*1) The classification of animals according to their movements within their environments:

\*a. Which of these animals walk?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*b. Which of these animals fly?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*c. Which of these animals swim?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*2) The classification of animals according to the number of feet they have:

\*a. Which of these animals have 4 feet?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*b. Which of these animals have 2 feet?

1 2 3 4 5  
very rarely rarely sometimes often very often

\*c. Which of these animals have no feet?

1 2 3 4 5  
very rarely rarely sometimes often very often

E. The child is able to classify clothes according to their functions. (Under-clothes, every-day clothes, clothes worn in bed, apparels worn on the head, apparels worn on the feet and outside clothes can be used as materials).

The child is asked the following:

\*1) Which of these clothes do we wear when we go to bed?

1 2 3 4 5  
very rarely rarely sometimes often very often

\*2) Which of these clothes do we wear outside?

1 2 3 4 5  
very rarely rarely sometimes often very often

\*3) Which of these clothes are under-clothes?

1 2 3 4 5  
very rarely rarely sometimes often very often

\*4) Which of these apparels do we wear on our head?

1 2 3 4 5  
very rarely rarely sometimes often very often

\*5) Which of these apparels do we wear on our feet?

1 2 3 4 5  
very rarely rarely sometimes often very often

\*6) Which of these clothes do we wear every-day?

1 2 3 4 5  
very rarely rarely sometimes often very often

F. The child is able to classify the different types of food. (For the vegetable group: pictures of carrots, tomato, spinach,



potatoes, onions, lettuce, cabbage, cauliflower, leeks, eggplant; for fruits pictures of bananas, apples, oranges, grapes, tangerines, melon, watermelon, figs, plums, cherries, strawberries, peaches, apricots; for meat pictures of hamburger patties, pork chops, steak, fish and poultry; for desert pictures of pudding, chocolate, candy, pastries, ice-cream and cakes can be used).

The child is asked to do the following:

\*1) Place all the vegetables here.

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*2) Place all the fruits here.

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*3) Place all the deserts here.

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*4) Which of these are meat?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

5. The child is able to classify furniture according to their functions.

The child is asked to do the following:

1) The specification of the functions of furniture:

\*a. A chair is shown to the child. She/he is asked this question, "What do we do on the chair?"

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*b. A table is shown to the child. She/he is asked this question, "What do we do on the table?"

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*c. A bed is shown to the child. She/he is asked this question, "What do we do on the bed?"

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*d. A bed is shown to the child. She/he is asked this question, "What do we do on the stove?"

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*e. A book-shelf is shown to the child. She/he is asked this question, "What do we put on this shelf?"

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*f. A book is shown to do child. She/he is asked this question, "What do we do with a book?"

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*g. A light is shown to do child. She/he is asked this question, "What does this light do?"

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*h. A piano is shown to do child. She/he is asked this question, "What do we do with a piano?"

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

- 2) Matching the furniture with its function: (Pictures of a chair, a couch, a table, a desk, a bed, a bench, a bunk, a bunk bed, a cabinet, a bookshelf, a stove, a piano, a violin, a lamp can be used).

The child is asked the following:

- \*a. On which of these do we sit?
- |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |
- \*b. On which of these do we sleep?
- |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |
- \*c. On which of these do we cook?
- |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |
- \*d. Which of this give light?
- |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |
- \*e. On which of these do we put our books?
- |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |
- \*f. On which of these do we eat or write?
- |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |
- \*g. Which of these do we play?
- |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

## 29. Seriation

- A. The child is able to seriate objects according to size. (Pictures of dark, medium and light green trees; dark, medium and light blue pencils; dark, medium and light

red cups; dark, medium, and light yellow leaves of big, medium and small sizes can be presented to the child).

- 1) The above stated materials are randomly arranged.

The child is asked to do the following:

- \*a. Place the biggest pictures here.
- |                   |                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| 1                 | 2                 | 3                 | 4                 | 5                 |
| <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> |
| very rarely       | rarely            | sometimes         | often             | very often        |
- \*b. Place the medium sized pictures here.
- |                   |                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| 1                 | 2                 | 3                 | 4                 | 5                 |
| <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> |
| very rarely       | rarely            | sometimes         | often             | very often        |
- \*c. Place the smallest pictures here.
- |                   |                   |                   |                   |                   |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| 1                 | 2                 | 3                 | 4                 | 5                 |
| <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> |
| very rarely       | rarely            | sometimes         | often             | very often        |

- 2) The pictures of the same objects are given in series of three.

The child is asked the following:

- \*a. Which one is the biggest?
- | 1           | 2        | 3         | 4        | 5          |
|-------------|----------|-----------|----------|------------|
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |
- \*b. Which one is the medium sized?
- | 1           | 2        | 3         | 4        | 5          |
|-------------|----------|-----------|----------|------------|
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |
- \*c. Which one is the smallest?
- | 1           | 2        | 3         | 4        | 5          |
|-------------|----------|-----------|----------|------------|
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

- B. The child is able to  
 separate objects  
 according to their  
 color tones. (The same  
 pictures of various  
 color tones and sizes  
 are also used here).

- 1) The pictures are arranged in a random order.

The child is asked the following.

- \*a. Place the darkest colored pictures here.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| <hr/>       |        |           |       |            |
| very rarely | rarely | sometimes | often | very often |
- \*b. Place the medium colored pictures here.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| <hr/>       |        |           |       |            |
| very rarely | rarely | sometimes | often | very often |
- \*c. Place the lightest colored pictures here.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| <hr/>       |        |           |       |            |
| very rarely | rarely | sometimes | often | very often |

- 2) Each of the series of three pictures are given to the child one by one.

The child is asked the following:

- \*a. Which one is the darkest?
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| <hr/>       |        |           |       |            |
| very rarely | rarely | sometimes | often | very often |
- \*b. Which one is the medium colored?
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| <hr/>       |        |           |       |            |
| very rarely | rarely | sometimes | often | very often |
- \*c. Which one is the lightest?
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| <hr/>       |        |           |       |            |
| very rarely | rarely | sometimes | often | very often |

3. The child can seriate objects according to weight, thickness, and size. (Wooden blocks, pencils and corks can be used).

The child is asked the following:

- \*a. Which one of these is the heaviest?
- |             |        |           |
|-------------|--------|-----------|
| 1           | 2      | 3         |
| <hr/>       |        |           |
| very rarely | rarely | sometimes |

\*b. Which one of these is the lightest?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*c. Which one of these is the thickest?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*d. Which one of these is the thinnest?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*e. Which one of these is the biggest?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*f. Which one of these is the smallest?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

2) The seriation of objects according to texture. (Woolen materials, a piece of velvet cloth and a piece of fur, and a piece of silk can be used).

The child is asked the following:

\*a. Which one of these is the furthest?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*b. Which one of these is the smoothest?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

\*c. Which one of these is the softest?

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

3) The seriation of objects according to height. (A shelf, a table and a chair can be used).

The child is asked the following:

\*a. Which one of these is the highest?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*b. Which one of these is the lowest?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

4) The seriation of objects according to their surface qualities such as straightness or crookedness.  
(Straight and crooked wooden blocks can be used).

The child is asked the following:

\*a. Which one is the straightest?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

\*b. Which one is the most crooked?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

## 5. Numbers

5. The child is able to count from 1 to 10.

The child is asked to count from 1 to 10.

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| very rarely  | rarely       | sometimes    | often        | very often   |

6. The child knows the corresponding quantities to the numbers between 1 and 10. (10 beads can be used here).

The child is asked to do the following:

\*1) Give me a bead.

|                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1               | 2               | 3               | 4               | 5               |
| <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> |
| very rarely     | rarely          | sometimes       | often           | very often      |

\*2) Give me 2 beads.

|                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1               | 2               | 3               | 4               | 5               |
| <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> |
| very rarely     | rarely          | sometimes       | often           | very often      |

\*3) Give me 5 beads.

|                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1               | 2               | 3               | 4               | 5               |
| <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> |
| very rarely     | rarely          | sometimes       | often           | very often      |

\*4) Give me 6 beads.

|                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1               | 2               | 3               | 4               | 5               |
| <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> |
| very rarely     | rarely          | sometimes       | often           | very often      |

\*5) Give me 8 beads.

|                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1               | 2               | 3               | 4               | 5               |
| <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> |
| very rarely     | rarely          | sometimes       | often           | very often      |

\*6) Give me 10 beads.

|                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1               | 2               | 3               | 4               | 5               |
| <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> |
| very rarely     | rarely          | sometimes       | often           | very often      |

C. The child matches the numbers 1 through 10 with identical quantities. (10 green beads and 10 pink beads can be used here).

The child is asked to do the following:

\*1) I am putting a bead here. Please put the same number of beads here.

|                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1               | 2               | 3               | 4               | 5               |
| <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> |
| very rarely     | rarely          | sometimes       | often           | very often      |

\*2) I am putting 2 beads here. Please put the same number of beads here.

|                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1               | 2               | 3               | 4               | 5               |
| <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> |
| very rarely     | rarely          | sometimes       | often           | very often      |

\*3) I am putting 6 beads here. Please put the same number of beads here.

|                 |                 |                 |                 |                 |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1               | 2               | 3               | 4               | 5               |
| <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> | <u>        </u> |
| very rarely     | rarely          | sometimes       | often           | very often      |



\*4) I am putting 7 beads here. Please  
beads here. Please  
put the same number very rarely rarely sometimes often very often  
of beads here.

\*5) I am putting 9 beads here. Please  
beads here. Please  
put the same number very rarely rarely sometimes often very often  
of beads here.

\*6) I am putting 10 beads here. Please  
beads here. Please  
put the same number very rarely rarely sometimes often very often  
of beads here.

### 31. Space

The child understands the concepts "in-out", "over-under", "in front of-in back of", "near", "between", "in the middle", "above", "under".

### 32. Direction

\*A. The child is able to arrange objects in the same direction as the teacher does. (Two toy cars, trucks, buses and train can be used). A car, a truck, a bus, and a train is placed in front of the child.

The child is asked the following:

"Please arrange the toys in the same direction as I have arranged them".

\*B. The child is able to arrange objects in reverse order as the teacher does. (The same materials used above can be utilized here).

The arrangement of the toys by the teacher is kept. The child's arrangement is disarranged.

The child is asked to do the following:

"Now, please arrange the toys in reverse order as I have done".

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>/</u>    | <u>/</u> | <u>/</u>  | <u>/</u> | <u>/</u>   |
| very rarely | rarely   | sometimes | often    | very often |

33. The child is able to copy;

\*A. A circle.

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>/</u>    | <u>/</u> | <u>/</u>  | <u>/</u> | <u>/</u>   |
| very rarely | rarely   | sometimes | often    | very often |

\*B. A square.

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>/</u>    | <u>/</u> | <u>/</u>  | <u>/</u> | <u>/</u>   |
| very rarely | rarely   | sometimes | often    | very often |

\*C. A triangle.

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>/</u>    | <u>/</u> | <u>/</u>  | <u>/</u> | <u>/</u>   |
| very rarely | rarely   | sometimes | often    | very often |

seeing the figures one at a time.

34. Time

The child is able to sequence events on a time dimension. (Four pictures of a girl/boy getting out of a bed, the child fully dressed except for bare feet, the child putting on a sock, the child putting on his second shoe can be shown. Other such sequences are also possible).

The child is asked to do the following:

"Arrange these pictures in an order".

|             |          |           |          |
|-------------|----------|-----------|----------|
| 1           | 2        | 3         | 4        |
| <u>/</u>    | <u>/</u> | <u>/</u>  | <u>/</u> |
| very rarely | rarely   | sometimes | often    |

representation

5. The child is able to represent objects by other objects.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

Example: The child holds a pencil to represent a telephone receiver. The child utters sounds to represent objects. The child says "ring-ring" to represent a telephone. Other objects can also be used.

IV. LANGUAGE DEVELOPMENT

understand and produce simple language forms

6. The child understands and produces simple language forms.

- A. The child produces sounds correctly.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

Example: P-T (cap-cat, cup-top).  
 P-B (peach-beach, pin-bin).  
 R-L (right-light, row-low).  
 R-Y (rear-year, rat-yacht).  
 L-Y (look-yolk, yeast-least).  
 C-T (cape-tape, clock-tight).

- B. The child understands the names of objects and produces them correctly.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

- C. The child understands simple and complete sentences and produces them.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

Example: The child makes sentences with subject-verb agreements.

- D. The child understands simple and complete sentences and produces them.
- |             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| /           | /      | /         | /     | /          |
| very rarely | rarely | sometimes | often | very often |

Example: The child makes sentences with correct endings like plural and tense.

Understand and produce elaborated language

## 37. Describe

- \*A. The child recognizes the description of an object by choosing the very rarely rarely sometimes often very often correct picture corresponding to that description among other pictures.

7. The child describes an object in a picture.
- |  |                   |                   |                   |                   |                   |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
|  | 1                 | 2                 | 3                 | 4                 | 5                 |
|  | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> |
|  | very rarely       | rarely            | sometimes         | often             | very often        |

## 38. Narrate

- |                                                                                               | 1 | 2 | 3 | 4 | 5 |
|-----------------------------------------------------------------------------------------------|---|---|---|---|---|
| *A. The child understands and produces the narration of events in very simple language forms. | / | / | / | / | / |

Example: The child is able to narrate a story after being read to by exhibiting a sequence of pictures in simple language forms.

- |                                                                                                                                           | 1 | 2 | 3 | 4 | 5 |
|-------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| B. The child understands and produces the narration of events in very rarely rarely sometimes often very often in complex language forms. | 1 | 1 | 1 | 1 | 1 |

Example: The child is able to narrate a story after being read to by looking at a sequence of pictures in complex language form.

19. Generalize, explain,  
predict.

- |                                                                                                                    | 1 | 2 | 3 | 4 | 5 |
|--------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| A. The child is able to understand "because", "and", "or", and "but" very rarely rarely sometimes often very often | 1 | 1 | 1 | 1 | 1 |

- |                                                                               | 1           | 2        | 3         | 4        | 5          |
|-------------------------------------------------------------------------------|-------------|----------|-----------|----------|------------|
| 6. The child is able to produce "because", "and", "for" and "but" statements. | <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
|                                                                               | very rarely | rarely   | sometimes | often    | very often |

Use language effectively for specific purposes to others

0. The child is able to use language effectively for specific purposes to others.

A. The child is able to follow directions.

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

3. The child is able to ask questions for information.

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

C. The child is able to imitate and make-believe in dramatic play.

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

Use language effectively for specific purposes to oneself

1. Cognition

The child is able to use language effectively to help his thinking.

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

Example: The child repeats words to himself in order to remember them, and answer questions to himself and uses self-guiding comments, "He "I did that wrong. I need to start over again"

Operate on language

2. Analyze

A. The child is able to analyze words into sounds. The words "hammer", "mother" and "Jim" are said to the child.

The child is asked the following:

\*1) What sound is repeated in these words? "hammer", "mother", "Jim".

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

\*2) Is the "mm" sound at the beginning, middle, or end of these words? "hammer", "other", "Jim".

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

2. The child is able to analyze sentences into words. The child is asked the following after being given the sentence "We are in school" orally "How many words are there in this sentence?"

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

3. Transform and translate

A. The child is able to give verbal definitions of words.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

B. The child can construct sentences using the teacher's as a model.

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

Example: The teacher describes a picture in one sentence, asks the child to describe a second picture.

4. Evaluation

The child is able to select the correct alternatives according to simple criteria.

A. Rhymes

The child is asked the following:

\*1) Which word rhymes with "Volkswagen"? "Pontiac" or "Polkwagon"

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

\*2) Which word rhymes with "moon"? "Cheese" or "soon".

|             |        |           |       |            |
|-------------|--------|-----------|-------|------------|
| 1           | 2      | 3         | 4     | 5          |
| very rarely | rarely | sometimes | often | very often |

\*3) Which word rhymes  
with "parrot"?  
"Flower" or  
"carrot".

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

\*E. Opposites

The child is asked the  
following:

Which word means "not  
cold"? "Big" or "hot"

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

\*C. The correct descrip-  
tion of a picture.  
(A picture showing  
three bears standing  
up looking at  
Goldilocks sleeping in  
a bed can be presented  
to the child).

The child is asked the  
following:

"Which of the  
following statement  
tells about this  
picture?

1) The Pink Panther is  
walking. (No)

2) The boys are  
playing with the  
girls. (No)

3) The three bears are  
looking at the  
little girl. (Yes)"

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

Effective component of language development

6. The child demonstrates  
the use of language  
frequently and with  
enjoyment.

|             |          |           |          |            |
|-------------|----------|-----------|----------|------------|
| 1           | 2        | 3         | 4        | 5          |
| <u>1</u>    | <u>1</u> | <u>1</u>  | <u>1</u> | <u>1</u>   |
| very rarely | rarely   | sometimes | often    | very often |

APPENDIX B

GÜZVER YILDIRAN\*

ROOSEVELT ÜNİVERSİTESİ HEAD START  
EĞİTİM PROGRAMI

OKUL ÖNCESİ HEDEFLERİNE DÖNÜK İZLEYİCİ DEĞERLENDİRME

1. SOSYO-DUYGUSAL GELİŞİM

Öğretmenle İlişki

1. Çocuk Öğretmenle ilişki kurar.

A. Çocuk Öğretmene güvenir.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

B. Çocuk Öğretmen ile etkileşimi başlatır.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

C. Çocuk Öğretmenin onayını bekler.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

D. Çocuk Öğretmenin davranışını model olarak kullanır.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

Kontrol

2. Çocuk iç kontrole sahiptir.

A. Çocuk yitirgeleri izleyebilir.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

B. Çocuk dikekt eder.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

Yardımcı Doç. Dr. Logazığı Üniversitesi, Eğitim Fakültesi, Eğitim Bilimleri Bölümü Öğretim Üyesi.

Ölçeğin inceleme tarihi: 22. Kasım.1982, İstanbul.

Yazarın ilgisiz ortamda bu araç kullanıldığını ve değerlendirildiğini.



Çocuk sürekli denetime  
gereksinmez.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

Çocuk sınıf düzenini  
bozmaz.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

### İletişim Niceliği

Çocuk diğer çocuklarla  
sık sık iletişim kurar ve  
etkileşime girer.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

### İletişim Niteliği

Çocuk diğer çocuklarla  
arkadaşlık kurar ve  
onlar tarafından sevi-  
lerek kabul görür.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

Çocuk eşyaları isteyey-  
rek paylaşır.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

Çocuk sıraya girmeyi  
kabullenir.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

Çocuk arasıra önderlik  
gösterir.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

### İda Rahat Olma

Çocuk okulda rahat ve  
genellikle mutlu gözük-  
ür.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

### İri Güldürü

Çocuk faaliyetleri  
başlatır.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

Çocuk başladığı işi  
tamamlayana kadar so-  
bat gösterir.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

Çocuk yaptığı işi iyi  
yapmaya çalışır.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

12. Çocuk karar vermek için düşünmeye vakit ayırır.

|     |          |          |          |          |          |
|-----|----------|----------|----------|----------|----------|
|     | 1        | 2        | 3        | 4        | 5        |
|     | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok | nadir    | nadiren  | bazen    | sık sık  | çok sık  |

#### Merak

13. Çocuk sorular sorar.

|     |          |          |          |          |          |
|-----|----------|----------|----------|----------|----------|
|     | 1        | 2        | 3        | 4        | 5        |
|     | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok | nadir    | nadiren  | bazen    | sık sık  | çok sık  |

14. Çocuk kendi çevresindeki eşyaları araştırır.

|     |          |          |          |          |          |
|-----|----------|----------|----------|----------|----------|
|     | 1        | 2        | 3        | 4        | 5        |
|     | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok | nadir    | nadiren  | bazen    | sık sık  | çok sık  |

15. Çocuk öğretmenden bilgi edinmeye çalışır.

|     |          |          |          |          |          |
|-----|----------|----------|----------|----------|----------|
|     | 1        | 2        | 3        | 4        | 5        |
|     | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok | nadir    | nadiren  | bazen    | sık sık  | çok sık  |

#### Yaratıcılık

16. Çocuk değişik durumlarda sadece bir doğru cevapla yetinmek yerine bir çok değişik fikir sunar.

|     |          |          |          |          |          |
|-----|----------|----------|----------|----------|----------|
|     | 1        | 2        | 3        | 4        | 5        |
|     | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok | nadir    | nadiren  | bazen    | sık sık  | çok sık  |

17. Çocuk materyalleri çeşitli biçimlerde kullanır.

|     |          |          |          |          |          |
|-----|----------|----------|----------|----------|----------|
|     | 1        | 2        | 3        | 4        | 5        |
|     | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok | nadir    | nadiren  | bazen    | sık sık  | çok sık  |

## II. ALGISAL - DEVİMSSEL GELİŞİM

#### Büyük Devimsel Uyum

18. Çocuk yerdaki 10 cm eninde, 250 cm boyundaki şeridin üzerinde dışına çıkmadan yan yana yürüyebilir.

|     |          |          |          |          |          |
|-----|----------|----------|----------|----------|----------|
|     | 1        | 2        | 3        | 4        | 5        |
|     | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok | nadir    | nadiren  | bazen    | sık sık  | çok sık  |

19. Çocuk yerdeki küçük bir cismin üzerinden, iki ayağı ile sıçrayıp, iki ayağı üzerine düşebilir.

|     |          |          |          |          |          |
|-----|----------|----------|----------|----------|----------|
|     | 1        | 2        | 3        | 4        | 5        |
|     | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok | nadir    | nadiren  | bazen    | sık sık  | çok sık  |

\* Yıldız ile işaretlenmiş maddeler çocuk 11. yaş grubuna göre değerlendirilir. Diğer maddeler çocuk başka bir faaliyetle meşgulken 12. yaş grubuna göre değerlendirilir.

Çocuk tek ayağıyla  
dört ya da beş defa  
sıçrayabilir.

| 1         | 2       | 3     | 4       | 5       |
|-----------|---------|-------|---------|---------|
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

### ce Devirsel Uyum

Çocuk ortasına bir  
çizgi çizilmiş olan  
kağıdı makasla keserek  
ikiye ayırabilir.  
(Çocuğa "Kağıdı çizgi-  
nin üzerinden kes"  
denir).

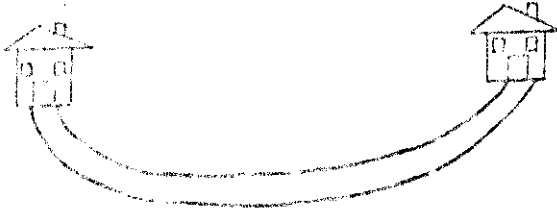
| 1         | 2       | 3     | 4       | 5       |
|-----------|---------|-------|---------|---------|
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

Çocuk Öğretmeni gözle-  
dikten sonra, bir ki-  
tabın sayfalarını bi-  
rer birer çevirebilir.

| 1         | 2       | 3     | 4       | 5       |
|-----------|---------|-------|---------|---------|
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

Çocuk yaklaşık 1.5 cm  
aralıklı iki çizgi  
arasına, dışına çıkma-  
dan bir çizgi çizebi-  
lir.

| 1         | 2       | 3     | 4       | 5       |
|-----------|---------|-------|---------|---------|
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |



Çocuk: "Yolumu al ve bu yoldan bir ceden ibir eve git. Yolun ortasında  
t. Kiledini yolum üzerinde tut ve yoldan dışarı çıkma" denir.

### III. BİLİŞSEL GELİŞİM

#### ziksel Bilgi

Çocuk çevresindeki eş-  
yalarda hangisinin  
kırılacağını, yuvarla-  
nacağını, esneyeceği-  
ni, alacağını,  
yırılacağını ve zıp-  
layacağını bilir.

| 1         | 2       | 3     | 4       | 5       |
|-----------|---------|-------|---------|---------|
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

Çocuk: Can kavanoz, tekerlek, lastik bant, kağıt, baskı, top.

5. Çocuk kendi çevresindeki eşyaların isimlerini bilir. (Çocuğa şemsiye, mum, dondurma külâhı, kalem, lamba, top gibi eşyaların resimleri gösterilebilir).

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

6. Çocuk kendi çevresindeki eşyaların işlevlerini bilir. (Yukarıdaki resimler burada da kullanılır).

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

#### Osval Bilgi

7. Çocuk kendi çevresindeki insanların rollerini bilir.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

Örnek: Doktor, polis, öğretmen, anne, baba.

#### Matıksal Bilgi

##### 8. Sınıflandırma

A. Çocuk eşyaları renklerine göre sınıflandırabilir. (Materyal olarak kırmızı büyük kare, mavi orta büyüklükteki kare, sarı küçük kare; sarı büyük üçgen, kırmızı orta büyüklükteki üçgen, mavi küçük üçgen; mavi büyük daire, sarı orta büyüklükteki daire, kırmızı küçük daire düzlemleri kullanılır).

Çocuktan şunları yapması istenir:

\*1) Kırmızı şekilleri buraya toplar.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*2) Mavi şekilleri buraya toplar.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*3) Sarı şekilleri bir araya topla.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

Çocuk eşyaları şekillerine göre sınıflandırabilir. (Yukarıda kullanılan çeşitli büyüklükteki renkli düzlemler burada da kullanılır).

Çocuktan şunları yapması istenir:

\*1) Daireleri bir araya topla.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*2) Kareleri bir araya topla.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*3) Üçgenleri bir araya topla.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

Çocuk eşyaları büyüklüklerine göre sınıflandırabilir. (Yukarıda kullanılan çeşitli büyüklüklerdeki renkli düzlemler burada da kullanılır).

Çocuktan şunları yapması istenir:

\*1) Bu şekillerden en büyüklerini bir araya topla.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*2) Bu şekillerden orta büyüklüktekileri bir araya topla.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*3) Bu şekillerden en küçüklerini bir araya topla.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

5. Çocuk hayvanları çeşitli özelliklerine göre sınıflandırabilir. (Materyal olarak kedi, köpek, at, inek, koyun, aslan, fil, maymun, kuş, balık, arı, kelebek resimleri kullanılır).

Çocuğa şu sorular sorulur:

1) Hayvanların ortamlarındaki devimlerine göre sınıflandırılması:

\*a. Bu hayvanlardan hangileri yürür?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| çok nadir    | nadiren      | bazen        | sık sık      | her zaman    |

\*b. Bu hayvanlardan hangileri uçar?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| çok nadir    | nadiren      | bazen        | sık sık      | her zaman    |

\*c. Bu hayvanlardan hangisi yüzer?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| çok nadir    | nadiren      | bazen        | sık sık      | her zaman    |

2) Hayvanların ayak sayılarına göre sınıflandırılması:

\*a. Hangi hayvanların dört ayağı var?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| çok nadir    | nadiren      | bazen        | sık sık      | her zaman    |

\*b. Hangi hayvanların iki ayağı var?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| çok nadir    | nadiren      | bazen        | sık sık      | her zaman    |

\*c. Hangi hayvanların ayakları yok?

|              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|
| 1            | 2            | 3            | 4            | 5            |
| <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> | <u>  /  </u> |
| çok nadir    | nadiren      | bazen        | sık sık      | her zaman    |

3. Çocuk giysileri kullanılışlarına göre sınıflandırabilir. (Materyal olarak iç çamaşırları, sırta giyilen giysiler, yatığa giyilen giysiler, başa giyilen giysiler, ayağa

giyilen şeyler ve so-  
ğukta sokakta giyilen  
giysiler kullanılabi-  
lir).

Çocuğa şu sorular so-  
rulur:

- \*1) Bunlardan hangile-  
rini ayırmaya gider-  
ken giyeriz? 1 2 3 4 5  
/ / / / /  
çok nadir nadiren bazen sık sık çok sık
- \*2) Bunlardan hangile-  
rini sokakta giye-  
riz? 1 2 3 4 5  
/ / / / /  
çok nadir nadiren bazen sık sık çok sık
- \*3) Bunlardan hangileri  
iç çamaşıridir? 1 2 3 4 5  
/ / / / /  
çok nadir nadiren bazen sık sık çok sık
- \*4) Bunlardan hangile-  
rini başımıza giye-  
riz? 1 2 3 4 5  
/ / / / /  
çok nadir nadiren bazen sık sık çok sık
- \*5) Bunlardan hangile-  
rini ayırmaya gi-  
yeriz? 1 2 3 4 5  
/ / / / /  
çok nadir nadiren bazen sık sık çok sık
- \*6) Bunlardan hangile-  
rini sırtımıza gi-  
yeriz? 1 2 3 4 5  
/ / / / /  
çok nadir nadiren bazen sık sık çok sık

F. Çocuk yiyecekleri  
cinslerine göre sınıf-  
landırılabilir. (Mater-  
yal olarak sebzeler grubu  
için havuç, domates,  
ispanak, patates, so-  
ğan, yeşil salata, la-  
hana, karnabekar, pi-  
rasta, patlıcan; meyve  
grubu için muz, elma,  
portakal, üzüm, manda-  
lina, kavun, karpuz,  
incir, erik, kiraz,  
çilek, şeftali, kayı-  
sı; et grubu için köf-  
te, pirzola, biftek,  
balık, tavuk; tatlı  
grubu için baklava,  
çikolata, şeker, kade-  
yif, pasta, bal, reçel  
resimleri kullanılır).

Çocuktan şunları yap-  
ması istenir:

- \*1) Bütün sebzeleri bir araya topla.
- |           |          |          |          |          |
|-----------|----------|----------|----------|----------|
| 1         | 2        | 3        | 4        | 5        |
| <u>1</u>  | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok nadir | nadiren  | bazen    | sık sık  | çok sık  |
- \*2) Bütün meyveleri bir araya topla.
- |           |          |          |          |          |
|-----------|----------|----------|----------|----------|
| 1         | 2        | 3        | 4        | 5        |
| <u>1</u>  | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok nadir | nadiren  | bazen    | sık sık  | çok sık  |
- \*3) Bütün tatlıları bir araya topla.
- |           |          |          |          |          |
|-----------|----------|----------|----------|----------|
| 1         | 2        | 3        | 4        | 5        |
| <u>1</u>  | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok nadir | nadiren  | bazen    | sık sık  | çok sık  |
- \*4) Bunlardan hangileri et?
- |           |          |          |          |          |
|-----------|----------|----------|----------|----------|
| 1         | 2        | 3        | 4        | 5        |
| <u>1</u>  | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok nadir | nadiren  | bazen    | sık sık  | çok sık  |

G. Çocuk ev eşyalarını işlevlerine göre sınıflandırabilir.

Çocuktan şunları yap-  
ması istenir:

1) Eşyaların işlevle-  
rinin belirtilmesi:

- \*a. Çocuğa bir sandalye gösterilir ve "San-  
dalyede ne yaparız?" denir.
- |           |          |          |          |          |
|-----------|----------|----------|----------|----------|
| 1         | 2        | 3        | 4        | 5        |
| <u>1</u>  | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok nadir | nadiren  | bazen    | sık sık  | çok sık  |
- \*b. Çocuğa bir masa gösterilir ve "Ma-  
sada ne yaparız?" denir.
- |           |          |          |          |          |
|-----------|----------|----------|----------|----------|
| 1         | 2        | 3        | 4        | 5        |
| <u>1</u>  | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok nadir | nadiren  | bazen    | sık sık  | çok sık  |
- \*c. Çocuğa bir yatak gösterilir ve "Ya-  
takta ne yaparız?" denir.
- |           |          |          |          |          |
|-----------|----------|----------|----------|----------|
| 1         | 2        | 3        | 4        | 5        |
| <u>1</u>  | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok nadir | nadiren  | bazen    | sık sık  | çok sık  |
- \*d. Çocuğa bir ocak gösterilir ve  
"Ocakta ne yaparız?" denir.
- |           |          |          |          |          |
|-----------|----------|----------|----------|----------|
| 1         | 2        | 3        | 4        | 5        |
| <u>1</u>  | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok nadir | nadiren  | bazen    | sık sık  | çok sık  |
- \*e. Çocuğa bir kütüphane gösterilir ve  
"Kütüphaneye ne ko-  
nu?" denir.
- |           |          |          |          |          |
|-----------|----------|----------|----------|----------|
| 1         | 2        | 3        | 4        | 5        |
| <u>1</u>  | <u>1</u> | <u>1</u> | <u>1</u> | <u>1</u> |
| çok nadir | nadiren  | bazen    | sık sık  | çok sık  |



\*f. Çocuğa bir kitap gösterilir ve "Kitapla ne yapılır?" denir.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*g. Çocuğa ışık gösterilir, "Işık ne yapar?" denir.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*h. Çocuğa piyano gösterilir, "Piyanoyla ne yapılır?" denir.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

2) İşlevin eşya ile eşleştirilmesi:  
(Materyal olarak iskemle, koltuk, masa, sehpa, büro, yatak, çeşitli, raunza, dolap, kütüphane, ocak, piyano, keman, lamba resimleri kullanılır).

Çocuğa şu sorular sorulur:

\*a. Bunlardan hangilerinin üzerine oturulur?

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*b. Bunlardan hangisinde uyunur?

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*c. Bunlardan hangisinin üzerinde yemek pişer?

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*d. Bunlardan hangisi odemizi aydınlatır?

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*e. Bunlardan hangisine kitaplarımızı koyarız?

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*f. Bunlardan hangilerinin üzerinde yemek yeriz, yazı yazarız?

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*g. Bunlardan hangilerini çalarız?

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

## 29. Sıralama

A. Çocuk eşyaları büyük-  
lüklerine göre sırala-  
yabilir. (Materyal  
olarak yeşil, mavi,  
kırmızı, sarı renkle-  
rinin koyu, orta ve  
açık tonlarında, çe-  
şitli büyüklüklerde  
ağaç, kalem, fişan ve  
yaprak resimleri kul-  
lanılır).

1) Çeşitli büyüklük ve  
renk tonlarındaki  
ağaç, kalem, fişan  
ve yaprak resimleri  
rastgele bir şekil-  
de dizilerek, ço-  
cuktan şunlar iste-  
nir:

\*a. En büyüklerini bir  
araya topla.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*b. Orta büyüklükteki-  
leri bir araya top-  
la.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*c. En küçüklerini bir  
araya topla.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

2) Çeşitli büyüklük ve  
renk tonlarından  
oluşan resimler bi-  
rer seri halinde  
tek tek verilerek  
çocuğa şunlar soru-  
lur:

\*a. En büyüğü hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*b. Orta büyüklükte  
olan hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*c. En küçüğü hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

B. Çocuk eşyaları renklerinin tonlarına göre sıralayabilir. (Yukarıda kullanılan çeşitli büyüklük ve renk tonlarındaki resimler burada da kullanılır).

1) Resimler rastgele dizilerek çocuktan şunlar istenir:

- \*a. En koyu renkli alanları bir araya toplar.
- |           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |
- \*b. Rengi orta koyulukta alanları bir araya toplar.
- |           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |
- \*c. En açık renkli alanları bir araya toplar.
- |           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

2) Her resim serisi çocuğa tek tek verilirerek, şunlar sorulur:

- \*a. En koyu renklisi hangisi?
- |           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |
- \*b. Rengi orta koyulukta olan hangisi?
- |           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |
- \*c. En açık renklisi hangisi?
- |           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| /         | /       | /     | /       | /       |
| çok nadir | nadiren | bazen | sık sık | çok sık |

C. Çocuk eşyaları niteliklerine göre sıralayabilir.

1) Eşyaların ağırlık, kalınlık, büyüklük niteliklerine göre sıralanması: (Materyal olarak tahta blok, kalem ve matite kullanılır).

Çocuğa şu sorular sorulur:

\*a. En ağırı hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*b. En hafifi hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*c. En kalını hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*d. En incesi hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*e. En büyüğü hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*f. En küçüğü hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

2) Eşyaların dokusal niteliklerine göre sıralanması: (Materiyel olarak yün-lü, kumruş, saten kumruş ve kumruş parçası kullanılır).

Çocuğa şu sorular sorulur:

\*a. En tüylüsü hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*b. En tüysüzü hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*c. En yumuşağı hangisi?

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

3) Eşyaların yükseklik niteliklerine göre sıralanması: (Materyal olarak raf, masa, sandalye kullanılır).

Çocuğa şu sorular sorulur:

\*a. En yükseği hangisi?

|           |          |          |          |             |
|-----------|----------|----------|----------|-------------|
| 1         | 2        | 3        | 4        | 5           |
| <u>1</u>  | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u>    |
| çok nadir | nadiren  | bazen    | çok sık  | çok çok sık |

\*b. En alçağı hangisi?

|           |          |          |          |             |
|-----------|----------|----------|----------|-------------|
| 1         | 2        | 3        | 4        | 5           |
| <u>1</u>  | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u>    |
| çok nadir | nadiren  | bazen    | çok sık  | çok çok sık |

4) Eşyaların yüzeysel niteliklerine göre sıralanması: (Materyal olarak eğri ve düz tahta şekiller kullanılır).

Çocuğa şu sorular sorulur:

\*a. En düzü hangisi?

|           |          |          |          |             |
|-----------|----------|----------|----------|-------------|
| 1         | 2        | 3        | 4        | 5           |
| <u>1</u>  | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u>    |
| çok nadir | nadiren  | bazen    | çok sık  | çok çok sık |

\*b. En eğrisi hangisi?

|           |          |          |          |             |
|-----------|----------|----------|----------|-------------|
| 1         | 2        | 3        | 4        | 5           |
| <u>1</u>  | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u>    |
| çok nadir | nadiren  | bazen    | çok sık  | çok çok sık |

5. Sayılar

a. Çocuk birden ona kadar sayabilir. Çocuktan birden ona kadar sayması istenir.

|           |          |          |          |             |
|-----------|----------|----------|----------|-------------|
| 1         | 2        | 3        | 4        | 5           |
| <u>1</u>  | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u>    |
| çok nadir | nadiren  | bazen    | çok sık  | çok çok sık |

b. Çocuk birden ona kadar sayıların karşılığı olan nicelikleri bilir. (Materyal olarak 10 tane boncuk kullanılır).

Çocuktan şunları yapması istenir:

\*1) Bana 1 boncuk ver.

|           |          |          |          |             |
|-----------|----------|----------|----------|-------------|
| 1         | 2        | 3        | 4        | 5           |
| <u>1</u>  | <u>2</u> | <u>3</u> | <u>4</u> | <u>5</u>    |
| çok nadir | nadiren  | bazen    | çok sık  | çok çok sık |

2) Bana 2 boncuk ver.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

3) Bana 5 boncuk ver.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

4) Bana 6 boncuk ver.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

5) Bana 8 boncuk ver.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

6) Bana 10 boncuk ver.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

C. Çocuk birden ona kadar olan sayıları eşit niceliklerle eşleştirir. (Materyal olarak 10 yeşil ve 10 pembe boncuk kullanılır).

Çocuktan şunları yapılması istenir:

\*1) Ben buraya 1 boncuk koydum. Sen de şuraya aynı sayıda boncuk koy.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*2) Ben buraya 2 boncuk koydum. Sen de şuraya aynı sayıda boncuk koy.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*3) Ben buraya 6 boncuk koydum. Sen de şuraya aynı sayıda boncuk koy.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*4) Ben buraya 7 boncuk koydum. Sen de şuraya aynı sayıda boncuk koy.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*5) Ben buraya 9 boncuk koydum. Sen de şuraya aynı sayıda boncuk koy.

|           |         |       |         |         |
|-----------|---------|-------|---------|---------|
| 1         | 2       | 3     | 4       | 5       |
| <hr/>     |         |       |         |         |
| çok nadir | nadiren | bazen | sık sık | çok sık |

\*6) Ben buraya 10 boncuk koydum. Sen de şuraya aynı sayıda boncuk koy.

1 2 3 4  
/ / / /  
çok nadir nadiren bazen sık sık

### 31. Mekân kavramı

Çocuk şu kavramları aklar: "İçinde-şisinde", "üstünde-altında", "önünde-arkasında", "yanında", "arasında", "başında", "sonunda", "ortasında", "yakarada", "aşağıda".

1 2 3 4  
/ / / /  
çok nadir nadiren bazen sık sık

### 32. Düzenleme

A. Çocuk öğretmenin yaptığına bakarak eşyaları aynı yönde düzenleyebilir. (Materyal olarak ikişer tane oyuncak otomobil, kamyon, otobüs, tren kullandırılır).

Çocuğun önüne sırayla birer otomobil, kamyon, otobüs, tren konularak, şunu yapması istenir:

"Sen de benim yaptığım gibi, oyuncakları aynı yönde diz."

1 2 3 4  
/ / / /  
çok nadir nadiren bazen sık sık

B. Çocuk eşyaları ters yönde düzenleyebilir. (Yukarıda kullanılan materyaller burada da kullanılır).

Öğretmenin yaptığı örnek düzenleme koruması, çocuğun yukarıda yaptığı düzenleme hatalar ve çocuktan şunu yapması istenir:

"Şimdi de oyuncakları benim yaptığımın tersi gibi diz."

1 2 3 4  
/ / / /  
çok nadir nadiren bazen sık sık

33. Çocuk önce şekillerini  
gördüğü

\*A. Bir daireyi kopye ede-  
bilir.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*B. Bir kareyi kopye ede-  
bilir.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

\*C. Bir üçgeni kopye ede-  
bilir.

|     |       |         |       |         |         |
|-----|-------|---------|-------|---------|---------|
|     | 1     | 2       | 3     | 4       | 5       |
|     | /     | /       | /     | /       | /       |
| çok | nadir | nadiren | bazen | sık sık | çok sık |

34. Zaman

Çocuk bir zaman boyutu  
içinde olayları sıra-  
layabilir. (Materyal  
olarak yataktan kal-  
kan, elbiseli ama çıp-  
lak ayaklı, çorapları-  
nı giyen, ayakkabısı-  
nın ikinci tekini gi-  
yen bir kız/erkek çö-  
çüğüne ait dört resim  
kullanılır. Böyle baş-  
ka resimler de kulla-  
nılabilir).

Çocuktan şunu yapması  
istenir:

"Bu resimleri sıraya  
koy".

|     |       |         |       |         |
|-----|-------|---------|-------|---------|
|     | 1     | 2       | 3     | 4       |
|     | /     | /       | /     | /       |
| çok | nadir | nadiren | bazen | sık sık |

Temsil Etme

35. Çocuk oyunları başka  
oyunları temsil edecek  
şekilde kullanılabilir.

|     |       |         |       |         |
|-----|-------|---------|-------|---------|
|     | 1     | 2       | 3     | 4       |
|     | /     | /       | /     | /       |
| çok | nadir | nadiren | bazen | sık sık |

Örneği: Çocuk bir kalemi telefon ahizesini temsil ederek kalem tutulduğunu, telefon ah-  
zayı temsil ederek sesleri de çıkarabilir. Çocuk telefon ahizesini temsil ettiği  
bir kalem kullanılabilir ve kaleme "ale-alo" denir. Başka örnekler de kullanılabilir.



#### IV. DİL GELİŞİMİ

##### Basit Dil Şekillerini Anlamak ve Üretmek

36. Çocuk basit dil şekillerini anlar ve üretir.

A. Çocuk sesleri doğru olarak çıkarır.

| 1         | 2       | 3     | 4          | 5       |
|-----------|---------|-------|------------|---------|
| /         | /       | /     | /          | /       |
| çok nadir | nadiren | bazen | genellikle | çok sık |

Örnek: G-S (söz-göz, sel-gel, güle güle-süpürge)  
S-Ş (su-şu, sirke-şişe)  
Ş-Ç (şarkı-çıkı, şimşek-çiçek)  
K-T (tavşan-kaplan, tilki-kirpi, taş-kaş)  
G-D (gemi-deli, gel-del)  
R-Y (renkli-yeni, ray-yay)  
K-L (resimli-leblebi, ramazan-limon)  
L-Y (limonata-yumurta, yelek-leylek)

B. Çocuk eşyaların isimlerini anlar ve doğru olarak söyler.

| 1         | 2       | 3     | 4          | 5       |
|-----------|---------|-------|------------|---------|
| /         | /       | /     | /          | /       |
| çok nadir | nadiren | bazen | genellikle | çok sık |

C. Çocuk basit ve tam cümleleri anlar ve böyle cümleler kurabilir.

| 1         | 2       | 3     | 4          | 5       |
|-----------|---------|-------|------------|---------|
| /         | /       | /     | /          | /       |
| çok nadir | nadiren | bazen | genellikle | çok sık |

Örnek: Özne-fiil düzenini kullanarak kurulan cümleler.

D. Çocuk basit ve tam cümleleri anlar ve böyle cümleler kurabilir.

| 1         | 2       | 3     | 4          | 5       |
|-----------|---------|-------|------------|---------|
| /         | /       | /     | /          | /       |
| çok nadir | nadiren | bazen | genellikle | çok sık |

Örnek: Geçmiş zaman ve çoğul hâli gibi doğru ekler alan cümleler.

##### Karşılaştık Dili Anlamak ve Üretmek

37. Batınlamak

A. Çocuk bir nesnenin tanımını tanıdığını doğru resmi başka resimler arasında seçerek gösterir.

| 1         | 2       | 3     | 4          | 5       |
|-----------|---------|-------|------------|---------|
| /         | /       | /     | /          | /       |
| çok nadir | nadiren | bazen | genellikle | çok sık |

B. Çocuk resimdeki eşyayı tarif eder.

| 1         | 2       | 3     | 4          | 5       |
|-----------|---------|-------|------------|---------|
| /         | /       | /     | /          | /       |
| çok nadir | nadiren | bazen | genellikle | çok sık |

38. Hikâye gibi anlatmak

- \*A. Çocuk karmaşık dille ifade edilen bir hikâyeyi basitleştirerek çok nadir nadiren bazen sık sık çok sık anlatır.

Örnek: Çocuk hikâyeye okunduktan sonra, hikâyedeki resimlerin dizilişlerine bakarak hikâyeyi tekrar anlatabilir.

- \*B. Çocuk karmaşık dille ifade edilen bir hikâyeyi karmaşık bir dille çok nadir nadiren bazen sık sık çok sık anlatır.

(Yukarıdaki Örnek burada da kullanılabilir).

39. Genelleyebilmek, açıklamak, yordamak.

- A. Çocuk "şönkü", "ve", "veya", "fakat" ifadelerini anlar. çok nadir nadiren bazen sık sık çok sık

- B. Çocuk "şönkü", "ve", "veya", "fakat" ifadelerini kullanır. çok nadir nadiren bazen sık sık çok sık

Başkalarıyla Dili Belirgin Amaçlar İçin Etkin Bir Şekilde Kullanmak

40. Çocuk başkalarıyla dili belirgin amaçlar için etkin bir şekilde kullanır.

- A. Çocuk yönergeleri izleyebilir. çok nadir nadiren bazen sık sık çok sık

- B. Çocuk bilgi edinmek için sorular sorabilir. çok nadir nadiren bazen sık sık çok sık

- C. Çocuk oyunlarda taklit yapabilir ve hayal gücünü kullanabilir. çok nadir nadiren bazen sık sık çok sık

Kendi Kendine Dili Belirgin Amaçlar İçin Etkin Bir Şekilde Kullanmak

41. Bilgi

- Çocuk dili kendi düğünceğini ifade etmek için kullanır. çok nadir nadiren bazen sık sık çok sık

Örnek: Çocuk yeni öğrendiği kelimeleri hatırlamak için kendi kendine onları tekrar eder, sorular sorar, cevaplar verir ve kendisine vel gösterici sorular sorar; "Bunu yanlış yaptım. Tekrar başlamak gerek" gibi.

## İli işlemek

### 2. Çözümlenmek

A. Çocuk kelimeleri seslere bölünebilir. Çocuğa "zil, biz, özge" kelimeleri söylenerek, şunlar sorulur:

\*1) Bu kelimelerde hangi sesi tekrar ediyoruz?

|           | 1 | 2 | 3 | 4 | 5 |
|-----------|---|---|---|---|---|
| çok nadir | / | / | / | / | / |
| nadiren   |   |   |   |   |   |
| bazen     |   |   |   |   |   |
| sık sık   |   |   |   |   |   |
| çok sık   |   |   |   |   |   |

\*2) Bu ses kelimenin başında mı, ortasında mı, sonunda mı?

|           | 1 | 2 | 3 | 4 | 5 |
|-----------|---|---|---|---|---|
| çok nadir | / | / | / | / | / |
| nadiren   |   |   |   |   |   |
| bazen     |   |   |   |   |   |
| sık sık   |   |   |   |   |   |
| çok sık   |   |   |   |   |   |

B. Çocuk cümleleri kelimelere bölünebilir. Çocuğa "Biz okula gidiyoruz" cümlesi söylenerek, şunlar sorulur:

"Bu cümlede kaç kelime var?"

|           | 1 | 2 | 3 | 4 | 5 |
|-----------|---|---|---|---|---|
| çok nadir | / | / | / | / | / |
| nadiren   |   |   |   |   |   |
| bazen     |   |   |   |   |   |
| sık sık   |   |   |   |   |   |
| çok sık   |   |   |   |   |   |

C. Değiştirmek ve çevirmek

D. Çocuk kelimelerin sözel tanımlarını yapabilir.

|           | 1 | 2 | 3 | 4 | 5 |
|-----------|---|---|---|---|---|
| çok nadir | / | / | / | / | / |
| nadiren   |   |   |   |   |   |
| bazen     |   |   |   |   |   |
| sık sık   |   |   |   |   |   |
| çok sık   |   |   |   |   |   |

E. Çocuk öğretmenin söylediıklarını model olarak kullanarak cümleler kurabilir.

|           | 1 | 2 | 3 | 4 | 5 |
|-----------|---|---|---|---|---|
| çok nadir | / | / | / | / | / |
| nadiren   |   |   |   |   |   |
| bazen     |   |   |   |   |   |
| sık sık   |   |   |   |   |   |
| çok sık   |   |   |   |   |   |

Örnek: Öğretmen bir cümlede bir resmi tarif eder, çocuktan ikinci resmi tarif etmesini ister.

### 3. Değerlendirmek

Çocuk basit ölçütlere göre doğru seçeneklerini belirleyebilir.

## A. Kafiyeleler

Çocuğa şunlar sorulur:

\*1) Hangi kelimenin sesi "otobüs" kelimesinin sesine benziyor? "Kamyon" ya da "Minibüs".

|     |                   |                   |                   |                   |                   |
|-----|-------------------|-------------------|-------------------|-------------------|-------------------|
|     | 1                 | 2                 | 3                 | 4                 | 5                 |
|     | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> |
| çok | nadir             | nadiren           | bazen             | sık sık           | çok sık           |

\*2) Hangi kelimenin sesi "bebek" kelimesinin sesine benziyor? "Kız" ya da "Erkek".

|     |                   |                   |                   |                   |                   |
|-----|-------------------|-------------------|-------------------|-------------------|-------------------|
|     | 1                 | 2                 | 3                 | 4                 | 5                 |
|     | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> |
| çok | nadir             | nadiren           | bazen             | sık sık           | çok sık           |

\*3) Hangi kelimenin sesi "sen" kelimesinin sesine benziyor? "Avcı" ya da "Ben".

|     |                   |                   |                   |                   |                   |
|-----|-------------------|-------------------|-------------------|-------------------|-------------------|
|     | 1                 | 2                 | 3                 | 4                 | 5                 |
|     | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> |
| çok | nadir             | nadiren           | bazen             | sık sık           | çok sık           |

## B. Karşıtlar

Çocuğa şu sorular:

Hangi kelimenin anlamı "küçük değil"? "Büyük" ya da "Sıcak".

|     |                   |                   |                   |                   |                   |
|-----|-------------------|-------------------|-------------------|-------------------|-------------------|
|     | 1                 | 2                 | 3                 | 4                 | 5                 |
|     | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> |
| çok | nadir             | nadiren           | bazen             | sık sık           | çok sık           |

\*C. Resmin doğru tarifi (İntervyu olarak üç arının sırtında durup, yatakte uyuyan küçük kızları seyretmesini gösteren bir resim kullanılır).

Çocuğa şu sorulur:

"Söyleneceklerinden hangisi bu resmi anlatıyor?"

1) Pembe Panter sokaga çıkmış (Hayır)

2) Oğlanlar kızlarla oynamıyor (Hayır)

3) Üç kız küçük kıza bakıyor (Evet)

|     |                   |                   |                   |                   |                   |
|-----|-------------------|-------------------|-------------------|-------------------|-------------------|
|     | 1                 | 2                 | 3                 | 4                 | 5                 |
|     | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> | <u>          </u> |
| çok | nadir             | nadiren           | bazen             | sık sık           | çok sık           |

Gelişiminin Duygusal Öğeleri

|                                                        |           |          |          |          |          |
|--------------------------------------------------------|-----------|----------|----------|----------|----------|
| Çocuk dili sık sık<br>zevkle kullandığını<br>gösterir. | 1         | 2        | 3        | 4        | 5        |
|                                                        | <u>/</u>  | <u>/</u> | <u>/</u> | <u>/</u> | <u>/</u> |
|                                                        | çok nadir | nadiren  | bazen    | sık sık  | çok sık  |

APPENDIX C

ROOSEVELT ÜNİVERSİTESİ  
HEAD START EĞİTİM PROGRAMI

Adı, Soyadı:

Tarih :

Yaşı :

Saat :

KISALTILMIŞ OKUL ÖNCESİ HEDEFLERİNE DÖNÜK İZLETİCİ DAVRANISLARIN NİCELİĞİ

1- çok nadir, 2- nadiren, 3- bazen, 4- sık sık, 5- çok sık

1. SOSYO-DUYGUSAL GELİŞİM

Öğretmenle İlişki

1. İlişki kurmak

A. Güvenmek

1 2 3 4 5

B. Etkileşimi başlatmak

1 2 3 4 5

C. Onay beklemek

1 2 3 4 5

D. Davranışını benimsemek

1 2 3 4 5

İç Kontrol

2. İç kontrol

A. Yönergeleri izlemek

1 2 3 4 5

B. Dikkat etmek

1 2 3 4 5

C. Denetime gereksinmemek

1 2 3 4 5

D. Düzeni bozmamak

1 2 3 4 5

Etkileşim Niceliği

3. İletişim kurmak, etkileşime girmek

1 2 3 4 5

Etkileşim Niteliği

4. Arkadaşlık kurmak

1 2 3 4 5

5. Eşyaları paylaşmak

1 2 3 4 5

6. Sıraya girmek

1 2 3 4 5

7. Önderlik göstermek

1 2 3 4 5

Okulda Rahat Olma

8. Rahat ve mutlu olmak

1 2 3 4 5

Başarı Güdüsü

9. Faaliyetleri başlatmak

1 2 3 4 5

10. Sebat göstermek

1 2 3 4 5

11. Yaptığı işi iyi yapmak

1 2 3 4 5

12. Karar vermek için düşünmek

1 2 3 4 5

Merak

13. Soru sormak

1 2 3 4 5

14. Araştırmak

1 2 3 4 5

15. Bilgi edinmek

1 2 3 4 5

Yaratıcılık

16. Değişik fikirler sunmak

1 2 3 4 5

17. Materyal kullanmak

1 2 3 4 5

II. ALGISAL - DEĞİŞİMSEL GELİŞİM

Ellyik Devimsel Uyum

18. Sol yan yürümek

1 2 3 4 5

19. İki ayakla sıçramak

1 2 3 4 5

20. Tek ayakla sıçramak

1 2 3 4 5

İnce Devimsel Uyum

21. Makarla kozmek

1 2 3 4 5

22. Sayın çevirmek

1 2 3 4 5

23. Çizgi çizmek

1 2 3 4 5

III. BİLİŞSEL GELİŞİM

Fiziksel Bilgi

24. Oyuncaların durumalarını bilmek

1 2 3 4 5

25. Oyuncaların isimlerini bilmek

1 2 3 4 5

26. Oyuncaların işlevlerini bilmek

1 2 3 4 5

Sosyal Bilgi

27. İnsanların rollerini bilmek

1 2 3 4 5

Mantıksal Bilgi

28. Sınıflandırma

A. Eşyaları renklerine göre sınıfl.

1) Kırmızı

1 2 3 4 5

2) Mavi

1 2 3 4 5

3) Sarı

1 2 3 4 5

B. Eşyaları şekillerine göre sınıfl.

1) Daire

1 2 3 4 5

2) Kare

1 2 3 4 5

3) Üçgen

1 2 3 4 5

C. Eşyaları büyüklüklerine göre sınıfl.

1) Büyük

1 2 3 4 5

2) Orta

1 2 3 4 5

3) Küçük

1 2 3 4 5

D. Hayvanları sınıflandırma

1) Ortamlarındaki devinimlerine göre

a) Yürüyen

1 2 3 4 5

b) Uçan

1 2 3 4 5

c) Yüzen

1 2 3 4 5

2) Ayak sayılarına göre

a) Dört ayaklı

1 2 3 4 5

b) İki ayaklı

1 2 3 4 5

c) Ayaksız

1 2 3 4 5

E. Giysileri sınıflandırma

1) Uyurken giydiklerimiz

1 2 3 4 5

2) Sokakta giydiklerimiz

1 2 3 4 5

3) İçimize giydiklerimiz

1 2 3 4 5

4) Başımıza giydiklerimiz

1 2 3 4 5

5) Ayağımıza giydiklerimiz

1 2 3 4 5

6) Sırtımıza giydiklerimiz

1 2 3 4 5



F. Yiyecekleri sınıflandırma

|             |   |   |   |   |   |
|-------------|---|---|---|---|---|
| 1) Sebzeler | 1 | 2 | 3 | 4 | 5 |
| 2) Meyveler | 1 | 2 | 3 | 4 | 5 |
| 3) Tatlılar | 1 | 2 | 3 | 4 | 5 |
| 4) Etler    | 1 | 2 | 3 | 4 | 5 |

G. Ev eşyalarını sınıflandırma

1) Eşyaların işlevlerinin belirtilmesi

|              |   |   |   |   |   |
|--------------|---|---|---|---|---|
| a) Sandalye  | 1 | 2 | 3 | 4 | 5 |
| b) Masa      | 1 | 2 | 3 | 4 | 5 |
| c) Yatak     | 1 | 2 | 3 | 4 | 5 |
| d) Ocak      | 1 | 2 | 3 | 4 | 5 |
| e) Kütüphane | 1 | 2 | 3 | 4 | 5 |
| f) Kitap     | 1 | 2 | 3 | 4 | 5 |
| g) Işık      | 1 | 2 | 3 | 4 | 5 |
| h) Piyano    | 1 | 2 | 3 | 4 | 5 |

2) İşlevin eşya ile eşleştirilmesi

|                              |   |   |   |   |   |
|------------------------------|---|---|---|---|---|
| a) Hangilerinde oturulur     | 1 | 2 | 3 | 4 | 5 |
| b) Hangilerinde uyunur       | 1 | 2 | 3 | 4 | 5 |
| c) Hangisinde yemek pişer    | 1 | 2 | 3 | 4 | 5 |
| d) Hangisi aydınlatır        | 1 | 2 | 3 | 4 | 5 |
| e) Hangisine kitap konur     | 1 | 2 | 3 | 4 | 5 |
| f) Hangilerinde yazı yazılır | 1 | 2 | 3 | 4 | 5 |
| g) Hangilerini çalarız       | 1 | 2 | 3 | 4 | 5 |

29. Sıralama

A. Eşyaları büyüklüklerine göre sıralama

1) Bastgele diziliste

|             |   |   |   |   |   |
|-------------|---|---|---|---|---|
| a) En büyük | 1 | 2 | 3 | 4 | 5 |
| b) Orta     | 1 | 2 | 3 | 4 | 5 |
| c) En küçük | 1 | 2 | 3 | 4 | 5 |

2) Seri halinde

|             |   |   |   |   |   |
|-------------|---|---|---|---|---|
| a) En büyük | 1 | 2 | 3 | 4 | 5 |
| b) Orta     | 1 | 2 | 3 | 4 | 5 |
| c) En küçük | 1 | 2 | 3 | 4 | 5 |

B. Renklerin tonlarına göre sıralanması

1) Rastgele dizilişte

|         |   |   |   |   |   |
|---------|---|---|---|---|---|
| a) Koyu | 1 | 2 | 3 | 4 | 5 |
| b) Orta | 1 | 2 | 3 | 4 | 5 |
| c) Açık | 1 | 2 | 3 | 4 | 5 |

2) Seri halinde dizilişte

|         |   |   |   |   |   |
|---------|---|---|---|---|---|
| a) Koyu | 1 | 2 | 3 | 4 | 5 |
| b) Orta | 1 | 2 | 3 | 4 | 5 |
| c) Açık | 1 | 2 | 3 | 4 | 5 |

C. Niteliklerine göre sıralanmak

1) Ağırlık, kalınlık, büyüklüğe göre

|          |   |   |   |   |   |
|----------|---|---|---|---|---|
| a) Ağır  | 1 | 2 | 3 | 4 | 5 |
| b) Hafif | 1 | 2 | 3 | 4 | 5 |
| c) İnce  | 1 | 2 | 3 | 4 | 5 |
| d) Kalın | 1 | 2 | 3 | 4 | 5 |
| e) Büyük | 1 | 2 | 3 | 4 | 5 |
| f) Küçük | 1 | 2 | 3 | 4 | 5 |

2) Dokusal niteliklerine göre

|            |   |   |   |   |   |
|------------|---|---|---|---|---|
| a) Tüylü   | 1 | 2 | 3 | 4 | 5 |
| b) Tüysüz  | 1 | 2 | 3 | 4 | 5 |
| c) Yumuşak | 1 | 2 | 3 | 4 | 5 |

3) Yükseklik niteliklerine göre

|           |   |   |   |   |   |
|-----------|---|---|---|---|---|
| a) Yüksek | 1 | 2 | 3 | 4 | 5 |
| b) Alçak  | 1 | 2 | 3 | 4 | 5 |

4) Yüzeysel niteliklerine göre

|         |   |   |   |   |   |
|---------|---|---|---|---|---|
| a) Düz  | 1 | 2 | 3 | 4 | 5 |
| b) Eğri | 1 | 2 | 3 | 4 | 5 |

30. Sayılar

A. Birden ona kadar saymak

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

B. Nicelikleri bilmek

|          |   |   |   |   |   |
|----------|---|---|---|---|---|
| 1) Bir   | 1 | 2 | 3 | 4 | 5 |
| 2) İki   | 1 | 2 | 3 | 4 | 5 |
| 3) Üç    | 1 | 2 | 3 | 4 | 5 |
| 4) Altı  | 1 | 2 | 3 | 4 | 5 |
| 5) Sekiz | 1 | 2 | 3 | 4 | 5 |
| 6) On    | 1 | 2 | 3 | 4 | 5 |

C. Eşit niceliklere eşleştirmek

|                 |   |   |   |   |   |
|-----------------|---|---|---|---|---|
| 1) Bir boncuk   | 1 | 2 | 3 | 4 | 5 |
| 2) İki boncuk   | 1 | 2 | 3 | 4 | 5 |
| 3) Altı boncuk  | 1 | 2 | 3 | 4 | 5 |
| 4) Yedi boncuk  | 1 | 2 | 3 | 4 | 5 |
| 5) Dokuz boncuk | 1 | 2 | 3 | 4 | 5 |
| 6) On boncuk    | 1 | 2 | 3 | 4 | 5 |

31. Mekan kavramı

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

32. Düzenleme

A. Aynı yönde düzenlemek

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

B. Ters yönde düzenlemek

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

33. Şekilleri kopya etmek

1) Daire

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

2) Kare

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

3) Üçgen

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

34. Zaman

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

35. Temsil Etme

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

IV. DİL GELİŞİMİ

Basit Dil Şekillerini Anlamak ve Üretmek

36. Dil şekillerini anlamak, üretmek

A. Setleri doğru çıkartmak

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

B. İmlileri anlamak, söylemek

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

C. Cümle kurmak(Özne-fiil)

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

D. Cümleleri anlamak, kurmak

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

Karşılaştıkça Dili Anlamak ve Üretmek

37. Betimlemek

A. Tarif anlamak

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

B. Tarif etmek

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|

38. Hikaye gibi anlatmak

A. Basitleştirerek anlatmak

1 2 3 4 5

B. Karmaşık dille anlatmak

1 2 3 4 5

39. Genelleyebilmek, açıklamak, yordamak

A. Anlamak

1 2 3 4 5

B. Kullanmak

1 2 3 4 5

Başkaları ile Dili Belirgin Amaçlar İçin Etkin  
Bir Şekilde Kullanmak

40. Dili Kullanmak

A. Yünergeleri izlemek

1 2 3 4 5

B. Sorular sormak

1 2 3 4 5

C. Taklit yapmak, hayal gücü

1 2 3 4 5

Kendi Kendine Dili Belirgin Amaçlar İçin Etkin  
Bir Şekilde Kullanmak

41. Bilgi

1 2 3 4 5

Dili İşlemek

42. Çözümlemek

A. Seslere bölmek

1) Ses tekrarı

1 2 3 4 5

2) Sesin yeri

1 2 3 4 5

B. Kelimelere bölmek

1 2 3 4 5

43. Değiştirmek ve çevirmek

A. Sözel tanımlar

1 2 3 4 5

B. Cümle kurmak

1 2 3 4 5

44. Değerlendirmek

A. Kafiyele

1) Otobüs

1 2 3 4 5

2) Bebek

1 2 3 4 5

3) Sen

1 2 3 4 5

B. Karşıtlar

1 2 3 4 5

C. Resmin tarifi

1 2 3 4 5

Dil Gelişiminin Duygusal Öğeleri

45. Dili etkili ve etkili kullanmak

Chronological Age of the 3 and 5 year-olds at the pre and post-test date

3 Year-Olds

| Child No | Group          | Birth Date | Pre - Test Date | Chronological Age |
|----------|----------------|------------|-----------------|-------------------|
| 1        | E <sub>1</sub> | 17.5.1979  | 18.3.1983       | 3/10/4            |
| 2        |                | 22.6.1979  | 17.1.1983       | 3/6/4             |
| 3        |                | 21.8.1979  | 14.1.1983       | 3/4/4             |
| 4        |                | 13.3.1979  | 18.1.1983       | 3/1/4             |
| 5        |                | 26.4.1979  | 20.1.1983       | 3/2/4             |
| 6        | C <sub>1</sub> | 26.8.1979  | 18.1.1983       | 3/3/4             |
| 7        |                | 25.2.1979  | 18.1.1983       | 3/1/4             |
| 8        |                | 14.4.1979  | 19.1.1983       | 3/2/4             |
| 9        |                | 3.3.1979   | 14.1.1983       | 3/1/4             |
| 10       |                | 17.8.1979  | 21.1.1983       | 3/2/4             |

5 Year-Olds

| Child No | Group          | Birth Date | Pre - Test Date | Chronological Age |
|----------|----------------|------------|-----------------|-------------------|
| 1        | E <sub>2</sub> | 30.12.1977 | 29.3.1983       | 5/1/6             |
| 2        |                | 9.3.1978   | 1.4.1983        | 5/0/6             |
| 3        |                | 1.12.1977  | 4.4.1983        | 5/3/5             |
| 4        |                | 20.12.1977 | 4.4.1983        | 5/4/5             |
| 5        |                | 6.7.1977   | 25.3.1983       | 5/7/5             |
| 6        | C <sub>2</sub> | 3.4.1978   | 25.3.1983       | 5/11/5            |
| 7        |                | 4.7.1977   | 30.3.1983       | 5/8/5             |
| 8        |                | 22.8.1977  | 23.3.1983       | 5/7/5             |
| 9        |                | 3.3.1978   | 4.4.1983        | 5/1/5             |
| 10       |                | 14.3.1978  | 29.3.1983       | 5/0/5             |

3 Year-Olds

| Child No | Group          | Birth Date | Post - Test Date | Chronological Age |
|----------|----------------|------------|------------------|-------------------|
| 1        | E <sub>1</sub> | 17.5.1979  | 2.7.1983         | 4/1/83            |
| 2        |                | 22.6.1979  | 30.6.1983        | 4/0/83            |
| 3        |                | 21.8.1979  | 30.6.1983        | 3/10/82           |
| 4        |                | 13.3.1979  | 1.7.1983         | 4/3/83            |
| 5        |                | 26.4.1979  | 30.6.1983        | 4/2/83            |
| 6        | C <sub>1</sub> | 26.8.1979  | 1.7.1983         | 3/10/82           |
| 7        |                | 25.2.1979  | 31.6.1983        | 4/1/83            |
| 8        |                | 14.4.1979  | 31.6.1983        | 4/2/83            |
| 9        |                | 3.3.1979   | 2.7.1983         | 4/1/83            |
| 10       |                | 17.8.1979  | 31.6.1983        | 3/11/82           |

5 Year-Olds

| Child No | Group          | Birth Date | Post Test Date | Chronological Age |
|----------|----------------|------------|----------------|-------------------|
| 1        | E <sub>2</sub> | 30.12.1977 | 25.6.1983      | 5/6/82            |
| 2        |                | 9. 3.1978  | 23.6.1983      | 5/5/82            |
| 3        |                | 1.12.1977  | 23.6.1983      | 5/8/82            |
| 4        |                | 20.12.1977 | 24.6.1983      | 5/6/82            |
| 5        |                | 6. 7.1977  | 24.6.1983      | 5/7/82            |
| 6        | C <sub>2</sub> | 3. 4.1978  | 27.6.1983      | 5/1/82            |
| 7        |                | 4. 7.1977  | 25.6.1983      | 5/11/81           |
| 8        |                | 22. 8.1977 | 24.6.1983      | 5/11/81           |
| 9        |                | 3. 3.1978  | 23.6.1983      | 5/5/82            |
| 10       |                | 14. 3.1978 | 27.6.1983      | 5/6/82            |

Pre-test

1. SOSYO-EMOSYONAL GELİŞİM

APPENDIX E

| Öğrenci No | Grup | Öğretmen İle İlişki |    |    |    | İç Kontrol |    |    |    | Etkileşim Niteliği | Etkileşim Niteliği |    |    |    | Okulda Rahat Olma | Bakarı Güdüsü |     |     |     | Merak |     |     | Yaratıcılık |     |
|------------|------|---------------------|----|----|----|------------|----|----|----|--------------------|--------------------|----|----|----|-------------------|---------------|-----|-----|-----|-------|-----|-----|-------------|-----|
|            |      | 1.A.                | B. | C. | D. | 2.A.       | B. | C. | D. | 3.                 | 4.                 | 5. | 6. | 7. | 8.                | 9.            | 10. | 11. | 12. | 13.   | 14. | 15. | 16.         | 17. |
| 1-         |      | 5                   | 5  | 5  | 4  | 5          | 5  | 4  | 4  | 5                  | 5                  | 4  | 4  | 4  | 5                 | 3             | 5   | 5   | 4   | 5     | 5   | 5   | 4           | 5   |
| 2-         |      | 5                   | 5  | 5  | 5  | 5          | 4  | 4  | 4  | 5                  | 5                  | 4  | 4  | 5  | 5                 | 5             | 4   | 5   | 4   | 5     | 4   | 4   | 3           | 3   |
| 3-         |      | 5                   | 5  | 5  | 4  | 5          | 5  | 5  | 5  | 3                  | 3                  | 5  | 5  | 5  | 5                 | 5             | 4   | 4   | 4   | 3     | 3   | 3   | 1           | 1   |
| 4-         |      | 5                   | 5  | 5  | 5  | 5          | 4  | 4  | 4  | 5                  | 5                  | 5  | 5  | 5  | 5                 | 5             | 4   | 4   | 4   | 5     | 5   | 5   | 4           | 4   |
| 5-         |      | 5                   | 5  | 5  | 5  | 5          | 5  | 4  | 4  | 5                  | 5                  | 5  | 5  | 5  | 5                 | 5             | 4   | 4   | 4   | 3     | 3   | 3   | 3           | 3   |
| 6-         |      | 5                   | 5  | 5  | 5  | 5          | 5  | 5  | 5  | 5                  | 5                  | 5  | 5  | 5  | 5                 | 5             | 5   | 5   | 5   | 5     | 5   | 5   | 5           | 5   |
| 7-         |      | 5                   | 5  | 5  | 5  | 5          | 5  | 5  | 5  | 5                  | 5                  | 5  | 5  | 5  | 5                 | 5             | 5   | 5   | 5   | 5     | 5   | 5   | 5           | 5   |
| 8-         |      | 5                   | 5  | 5  | 5  | 5          | 5  | 5  | 5  | 5                  | 5                  | 5  | 5  | 5  | 5                 | 5             | 5   | 5   | 5   | 5     | 5   | 5   | 5           | 5   |
| 9-         |      | 5                   | 5  | 5  | 5  | 5          | 5  | 5  | 5  | 5                  | 5                  | 5  | 5  | 5  | 5                 | 5             | 5   | 5   | 5   | 5     | 5   | 5   | 5           | 5   |
| 10-        |      | 5                   | 5  | 5  | 5  | 5          | 5  | 5  | 5  | 5                  | 5                  | 5  | 5  | 5  | 5                 | 5             | 5   | 5   | 5   | 5     | 5   | 5   | 5           | 5   |

## II. ALGAL-DEVELOPMENT

### III. BİLİŞSEL GELİŞİM

[illegible]







IV. DİL GELİŞİMİ

| Denek No | Grup | Mantıksal Bilgi |    |    |    |           |    |     |        | Basit Dil Şekillerini Anlamak ve Üretmek |        |    |    | Karmaşık Dili Anlamak ve Üretmek |     |        |    |              |    |        |    | Başkaları ile Dili Belirgin Amaçlar İçin Etkin Bir Şekilde Kullanmak |    |        |    |        |    |    |
|----------|------|-----------------|----|----|----|-----------|----|-----|--------|------------------------------------------|--------|----|----|----------------------------------|-----|--------|----|--------------|----|--------|----|----------------------------------------------------------------------|----|--------|----|--------|----|----|
|          |      | Mekan Kavramı   |    |    |    | Düzenleme |    |     |        | Şekilleri Kopya Etme                     |        |    |    | Zaman                            |     |        |    | Temelli Etme |    |        |    |                                                                      |    |        |    |        |    |    |
|          |      | C. 1)           | 2) | 3) | 4) | 5)        | 6) | 31. | 32. A. | B.                                       | 33. A. | B. | C. | 34.                              | 35. | 36. A. | B. | C.           | D. | 37. A. | B. | 38. A.                                                               | B. | 39. A. | B. | 40. A. | B. | C. |
| 1-       |      | 1               | 1  | 1  | 1  | 2         | 1  | 3   | 1      | 1                                        | 1      | 1  | 1  | 1                                | 4   | 5      | 5  | 5            | 5  | 5      | 5  | 4                                                                    | 1  | 5      | 4  | 5      | 5  | 5  |
| 2-       |      | 5               | 5  | 5  | 5  | 5         | 5  | 3   | 2      | 4                                        | 5      | 1  | 5  | 3                                | 5   | 5      | 5  | 5            | 5  | 5      | 5  | 5                                                                    | 2  | 4      | 3  | 5      | 6  | 5  |
| 3-       |      | 1               | 1  | 1  | 1  | 1         | 1  | 2   | 1      | 1                                        | 5      | 2  | 4  | 1                                | 3   | 5      | 5  | 5            | 5  | 5      | 5  | 5                                                                    | 1  | 5      | 3  | 4      | 3  | 5  |
| 4-       |      | 5               | 5  | 5  | 5  | 5         | 5  | 3   | 4      | 3                                        | 3      | 1  | 5  | 1                                | 3   | 5      | 5  | 5            | 5  | 5      | 5  | 5                                                                    | 1  | 5      | 3  | 5      | 3  | 5  |
| 5-       |      | 1               | 1  | 1  | 1  | 1         | 1  | 1   | 1      | 1                                        | 1      | 1  | 1  | 1                                | 1   | 1      | 1  | 1            | 1  | 1      | 1  | 1                                                                    | 1  | 1      | 1  | 1      | 1  | 1  |
| 6-       |      | 5               | 5  | 5  | 5  | 5         | 5  | 3   | 5      | 1                                        | 2      | 1  | 1  | 1                                | 4   | 5      | 5  | 5            | 5  | 5      | 5  | 5                                                                    | 1  | 5      | 3  | 5      | 3  | 5  |
| 7-       |      | 1               | 1  | 1  | 1  | 1         | 1  | 1   | 1      | 1                                        | 1      | 1  | 1  | 1                                | 1   | 1      | 1  | 1            | 1  | 1      | 1  | 1                                                                    | 1  | 1      | 1  | 1      | 1  | 1  |
| 8-       |      | 5               | 5  | 5  | 5  | 5         | 5  | 3   | 5      | 1                                        | 2      | 1  | 1  | 1                                | 4   | 5      | 5  | 5            | 5  | 5      | 5  | 5                                                                    | 1  | 5      | 3  | 5      | 3  | 5  |
| 9-       |      | 1               | 1  | 1  | 1  | 1         | 1  | 1   | 1      | 1                                        | 1      | 1  | 1  | 1                                | 1   | 1      | 1  | 1            | 1  | 1      | 1  | 1                                                                    | 1  | 1      | 1  | 1      | 1  | 1  |
| 10-      |      | 5               | 5  | 5  | 5  | 5         | 5  | 3   | 5      | 1                                        | 2      | 1  | 1  | 1                                | 4   | 5      | 5  | 5            | 5  | 5      | 5  | 5                                                                    | 1  | 5      | 3  | 5      | 3  | 5  |

| Denek No | Grup           | Dili İşlemler |    |    |        |    |           |    |    |    |            | $\bar{x}_i$ | $\bar{x}$ | N-1  | N    |
|----------|----------------|---------------|----|----|--------|----|-----------|----|----|----|------------|-------------|-----------|------|------|
|          |                | 42. A. 1)     | 2) | B. | 43. A. | B. | 44. A. 1) | 2) | B. | C. | Diyarbakır |             |           |      |      |
| 1-       | E <sub>1</sub> | 1             | 1  | 1  | 1      | 5  | 5         | 1  | 1  | 5  | 5          | 545:144     | 3.78      |      |      |
| 2-       |                | 3             | 3  | 3  | 3      | 5  | 5         | 1  | 1  | 1  | 5          | 616:144     | 4.28      |      |      |
| 3-       |                | 1             | 1  | 1  | 1      | 5  | 5         | 1  | 1  | 1  | 5          | 507:144     | 3.48      | .324 | .289 |
| 4-       |                | 1             | 1  | 1  | 1      | 5  | 5         | 1  | 1  | 1  | 5          | 586:144     | 4.09      |      |      |
| 5-       |                | 1             | 1  | 1  | 1      | 5  | 5         | 1  | 1  | 1  | 5          | 536:144     | 3.67      |      |      |
| 6-       | C <sub>1</sub> | 1             | 1  | 1  | 1      | 5  | 5         | 1  | 1  | 5  | 5          | 545:144     | 3.78      |      |      |
| 7-       |                | 1             | 1  | 1  | 1      | 5  | 5         | 1  | 1  | 5  | 5          | 536:144     | 3.67      |      |      |
| 8-       |                | 1             | 1  | 1  | 1      | 5  | 5         | 1  | 1  | 5  | 5          | 545:144     | 3.78      | .404 | .361 |
| 9-       |                | 1             | 1  | 1  | 1      | 5  | 5         | 1  | 1  | 5  | 5          | 536:144     | 3.67      |      |      |
| 10-      |                | 1             | 1  | 1  | 1      | 5  | 5         | 1  | 1  | 5  | 5          | 545:144     | 3.78      |      |      |

Pre-test

1. SOSYO-DUYUSAL GELİŞİM

APPENDIX F

| Denek Grup No | Öğretmen İlişkisi |    |    |    | İç Kontrol |    |    |    | Etkileşim |    |    |    | Okulda Rahat Olma |    |    |     | Bazari Durum |     |     |     | Menek |     |     | Yaratıcılık |  |
|---------------|-------------------|----|----|----|------------|----|----|----|-----------|----|----|----|-------------------|----|----|-----|--------------|-----|-----|-----|-------|-----|-----|-------------|--|
|               | 1.A.              | B. | C. | D. | 2.A.       | B. | C. | D. | 3.        | 4. | 5. | 6. | 7.                | 8. | 9. | 10. | 11.          | 12. | 13. | 14. | 15.   | 16. | 17. |             |  |
| 1-            | 5                 | 5  | 5  | 4  | 5          | 5  | 4  | 1  | 4         | 4  | 2  | 2  | 3                 | 5  | 5  | 4   | 4            | 3   | 3   | 3   | 3     | 3   | 4   |             |  |
| 2-            | 5                 | 4  | 5  | 4  | 5          | 4  | 5  | 5  | 5         | 3  | 5  | 5  | 2                 | 3  | 5  | 4   | 5            | 3   | 3   | 3   | 3     | 3   | 4   |             |  |
| 3-            | 5                 | 5  | 4  | 5  | 5          | 5  | 5  | 5  | 5         | 5  | 4  | 4  | 5                 | 5  | 4  | 5   | 5            | 4   | 4   | 4   | 4     | 5   | 5   |             |  |
| 4-            | 5                 | 4  | 5  | 5  | 5          | 4  | 5  | 5  | 5         | 5  | 4  | 5  | 2                 | 5  | 2  | 4   | 4            | 3   | 3   | 3   | 3     | 3   | 4   |             |  |
| 5-            | 5                 | 5  | 4  | 4  | 5          | 4  | 5  | 5  | 5         | 5  | 5  | 5  | 5                 | 5  | 4  | 4   | 4            | 4   | 4   | 4   | 4     | 4   | 4   |             |  |
| 6-            | 5                 | 4  | 5  | 4  | 5          | 4  | 5  | 5  | 5         | 5  | 4  | 4  | 5                 | 5  | 4  | 4   | 4            | 3   | 3   | 3   | 3     | 3   | 4   |             |  |
| 7-            | 5                 | 5  | 4  | 5  | 5          | 4  | 5  | 5  | 5         | 5  | 4  | 4  | 5                 | 5  | 4  | 4   | 4            | 4   | 4   | 4   | 4     | 4   | 4   |             |  |
| 8-            | 4                 | 5  | 5  | 5  | 5          | 4  | 5  | 5  | 5         | 5  | 4  | 4  | 5                 | 5  | 4  | 4   | 4            | 4   | 4   | 4   | 4     | 4   | 4   |             |  |
| 9-            | 4                 | 5  | 4  | 5  | 5          | 4  | 5  | 5  | 5         | 5  | 4  | 4  | 5                 | 5  | 4  | 4   | 4            | 4   | 4   | 4   | 4     | 4   | 4   |             |  |
| 10-           | 4                 | 5  | 4  | 5  | 5          | 4  | 5  | 5  | 5         | 5  | 4  | 4  | 5                 | 5  | 4  | 4   | 4            | 4   | 4   | 4   | 4     | 4   | 4   |             |  |



|          |            | Mantıksal Bilgi |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|----------|------------|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------|--|--|
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
|          |            |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |
| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Sıralama |  |  |
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| Denek No | Denek Grup |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |          |  |  |

| Nantıksal Bilgi |      |    |    |        |    |    |      |    |    |    |    |    |      |    | Sayılar |       |      |     |    |    |    |    |   |
|-----------------|------|----|----|--------|----|----|------|----|----|----|----|----|------|----|---------|-------|------|-----|----|----|----|----|---|
| Grup            |      |    |    |        |    |    |      |    |    |    |    |    |      |    |         |       |      |     |    |    |    |    |   |
|                 | 2.a) | b) | c) | B.1.a) | b) | c) | 2.a) | b) | c) | d) | e) | f) | 2.a) | b) | c)      | 30.A. | B.1) | 2.) | 3) | 4) | 5) | 6) |   |
| 1-              | 5    | 3  | 5  | 5      | 3  | 3  | 5    | 5  | 5  | 3  | 3  | 5  | 5    | 4  | 4       | 5     | 2    | 5   | 5  | 5  | 5  | 5  | 5 |
| 2-              | 5    | 5  | 5  | 5      | 5  | 4  | 5    | 5  | 5  | 4  | 4  | 5  | 5    | 4  | 4       | 5     | 4    | 5   | 5  | 5  | 5  | 5  | 5 |
| 3-              | 5    | 4  | 5  | 5      | 5  | 5  | 5    | 5  | 5  | 5  | 5  | 5  | 5    | 4  | 4       | 5     | 4    | 5   | 5  | 5  | 5  | 5  | 5 |
| 4-              | 5    | 3  | 5  | 5      | 5  | 4  | 5    | 5  | 5  | 4  | 4  | 5  | 5    | 4  | 4       | 5     | 4    | 5   | 5  | 5  | 5  | 5  | 5 |
| 5-              | 5    | 4  | 5  | 5      | 5  | 5  | 5    | 5  | 5  | 5  | 5  | 5  | 5    | 4  | 4       | 5     | 4    | 5   | 5  | 5  | 5  | 5  | 5 |
| 6-              | 5    | 4  | 5  | 5      | 5  | 5  | 5    | 5  | 5  | 5  | 5  | 5  | 5    | 4  | 4       | 5     | 4    | 5   | 5  | 5  | 5  | 5  | 5 |
| 7-              | 5    | 4  | 5  | 5      | 5  | 5  | 5    | 5  | 5  | 5  | 5  | 5  | 5    | 4  | 4       | 5     | 4    | 5   | 5  | 5  | 5  | 5  | 5 |
| 8-              | 5    | 4  | 5  | 5      | 5  | 5  | 5    | 5  | 5  | 5  | 5  | 5  | 5    | 4  | 4       | 5     | 4    | 5   | 5  | 5  | 5  | 5  | 5 |
| 9-              | 5    | 4  | 5  | 5      | 5  | 5  | 5    | 5  | 5  | 5  | 5  | 5  | 5    | 4  | 4       | 5     | 4    | 5   | 5  | 5  | 5  | 5  | 5 |
| 10-             | 5    | 4  | 5  | 5      | 5  | 5  | 5    | 5  | 5  | 5  | 5  | 5  | 5    | 4  | 4       | 5     | 4    | 5   | 5  | 5  | 5  | 5  | 5 |







REKABLER

APPENDIX G

1. SOSYAL-OKULSAL GELİŞİM

Post-test

| Denek<br>No | Öğretmen<br>Talihi |      |    |    | İç<br>Kontrol |      |    |    | Etkileşim<br>Nitelikli | Etkileşim<br>Nitelikli |    |    |    | Okulda<br>Rahat Olma | Başarı<br>Güçlüğü |    |    |     | Merak |     |     |     | Yaratıcılık |     |
|-------------|--------------------|------|----|----|---------------|------|----|----|------------------------|------------------------|----|----|----|----------------------|-------------------|----|----|-----|-------|-----|-----|-----|-------------|-----|
|             | 1.A.               | 2.A. | B. | C. | D.            | 2.A. | B. | C. |                        | D.                     | 4. | 5. | 6. |                      | 7.                | 8. | 9. | 10. | 11.   | 12. | 13. | 14. | 15.         | 16. |
| 1-          | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |
| 2-          | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |
| 3-          | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |
| 4-          | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |
| 5-          | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |
| 6-          | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |
| 7-          | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |
| 8-          | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |
| 9-          | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |
| 10-         | 5                  | 5    | 5  | 5  | 5             | 5    | 5  | 5  | 5                      | 5                      | 5  | 5  | 5  | 5                    | 5                 | 5  | 5  | 5   | 5     | 5   | 5   | 5   | 5           |     |



| Montiksal Bilgi |            |  |  |  |  |  |  |  |  |  |  |
|-----------------|------------|--|--|--|--|--|--|--|--|--|--|
| Grup<br>No      | E. 1)      |  |  |  |  |  |  |  |  |  |  |
|                 | 2)         |  |  |  |  |  |  |  |  |  |  |
|                 | 3)         |  |  |  |  |  |  |  |  |  |  |
|                 | 4)         |  |  |  |  |  |  |  |  |  |  |
|                 | 5)         |  |  |  |  |  |  |  |  |  |  |
|                 | 6)         |  |  |  |  |  |  |  |  |  |  |
|                 | F. 1)      |  |  |  |  |  |  |  |  |  |  |
|                 | 2)         |  |  |  |  |  |  |  |  |  |  |
|                 | 3)         |  |  |  |  |  |  |  |  |  |  |
|                 | 4)         |  |  |  |  |  |  |  |  |  |  |
|                 | G. 1.a)    |  |  |  |  |  |  |  |  |  |  |
| Grup<br>No      | b)         |  |  |  |  |  |  |  |  |  |  |
|                 | c)         |  |  |  |  |  |  |  |  |  |  |
|                 | d)         |  |  |  |  |  |  |  |  |  |  |
|                 | e)         |  |  |  |  |  |  |  |  |  |  |
|                 | f)         |  |  |  |  |  |  |  |  |  |  |
|                 | g)         |  |  |  |  |  |  |  |  |  |  |
|                 | h)         |  |  |  |  |  |  |  |  |  |  |
|                 | 2.a)       |  |  |  |  |  |  |  |  |  |  |
|                 | b)         |  |  |  |  |  |  |  |  |  |  |
|                 | c)         |  |  |  |  |  |  |  |  |  |  |
|                 | d)         |  |  |  |  |  |  |  |  |  |  |
| Grup<br>No      | e)         |  |  |  |  |  |  |  |  |  |  |
|                 | f)         |  |  |  |  |  |  |  |  |  |  |
|                 | g)         |  |  |  |  |  |  |  |  |  |  |
|                 | 29.A. 1.a) |  |  |  |  |  |  |  |  |  |  |
|                 | b)         |  |  |  |  |  |  |  |  |  |  |
|                 | c)         |  |  |  |  |  |  |  |  |  |  |
|                 | d)         |  |  |  |  |  |  |  |  |  |  |
|                 | e)         |  |  |  |  |  |  |  |  |  |  |
|                 | f)         |  |  |  |  |  |  |  |  |  |  |
|                 | g)         |  |  |  |  |  |  |  |  |  |  |
|                 | h)         |  |  |  |  |  |  |  |  |  |  |
|                 | i)         |  |  |  |  |  |  |  |  |  |  |

Hantıksal Bilgi

Sayılar

Group

| 3.a) | b) | c) | B.1.a) | b) | c) | 2.a) | b) | c) | C.1.a) | b) | c) | d) | e) | f) | 2.a) | b) | c) | 3.a) | b) | 4.a) | b) | 30.A. |   |   | B.1) | 2) | 3) | 4) | 5) | 6) |
|------|----|----|--------|----|----|------|----|----|--------|----|----|----|----|----|------|----|----|------|----|------|----|-------|---|---|------|----|----|----|----|----|
| 5    | 1  | 5  | 3      | 1  | 3  | 5    | 1  | 4  | 5      | 5  | 5  | 5  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 3     | 1 | 1 | 1    | 1  | 1  | 1  | 1  | 1  |
| 5    | 3  | 5  | 3      | 1  | 3  | 5    | 1  | 1  | 5      | 3  | 3  | 3  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 5     | 5 | 5 | 5    | 5  | 5  | 5  | 5  | 5  |
| 5    | 1  | 5  | 3      | 1  | 3  | 5    | 1  | 3  | 5      | 5  | 5  | 5  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 5     | 5 | 1 | 1    | 1  | 1  | 1  | 1  | 1  |
| 5    | 1  | 5  | 5      | 1  | 5  | 5    | 5  | 5  | 5      | 5  | 3  | 3  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 5     | 5 | 5 | 5    | 5  | 5  | 5  | 5  | 5  |
| 5    | 1  | 5  | 5      | 1  | 5  | 5    | 1  | 3  | 5      | 5  | 5  | 5  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 4     | 1 | 1 | 1    | 1  | 1  | 1  | 1  | 1  |
| 5    | 1  | 5  | 5      | 1  | 5  | 5    | 1  | 3  | 5      | 2  | 5  | 5  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 5     | 5 | 5 | 5    | 5  | 5  | 5  | 5  | 5  |
| 5    | 1  | 5  | 5      | 1  | 5  | 3    | 1  | 1  | 5      | 5  | 5  | 5  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 5     | 3 | 1 | 1    | 1  | 1  | 1  | 1  | 1  |
| 5    | 1  | 5  | 5      | 1  | 5  | 3    | 5  | 3  | 5      | 5  | 5  | 5  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 5     | 5 | 5 | 5    | 5  | 5  | 5  | 5  | 5  |
| 5    | 1  | 5  | 5      | 1  | 5  | 3    | 1  | 1  | 5      | 5  | 5  | 5  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 5     | 1 | 1 | 1    | 1  | 1  | 1  | 1  | 1  |
| 5    | 1  | 5  | 5      | 1  | 5  | 3    | 1  | 1  | 5      | 5  | 5  | 5  | 5  | 5  | 5    | 5  | 5  | 5    | 5  | 5    | 5  | 2     | 1 | 1 | 1    | 1  | 1  | 1  | 1  | 1  |

[illegible]

| Dereks<br>No | Dereks<br>Grup | Dereks Islemek |    |        |    |           |    |    |    |    |     | $\bar{x}_i$ | $\bar{x}$ | N-1<br>S | N<br>S |
|--------------|----------------|----------------|----|--------|----|-----------|----|----|----|----|-----|-------------|-----------|----------|--------|
|              |                | 42. A. 1)      | B. | 43. A. | B. | 44. A. 1) | 2) | 3) | B. | C. | 45. |             |           |          |        |
| 1-           | B <sub>1</sub> | 1              | 1  | 1      | 1  | 1         | 1  | 1  | 1  | 5  | 5   | 584:144     | 4.03      |          |        |
| 2-           |                | 3              | 2  | 2      | 2  | 2         | 1  | 1  | 1  | 5  | 5   | 643:144     | 4.47      |          |        |
| 3-           |                | 4              | 2  | 2      | 2  | 1         | 1  | 1  | 1  | 5  | 5   | 558:144     | 3.87      | 4.15     |        |
| 4-           |                | 5              | 2  | 2      | 2  | 1         | 1  | 1  | 1  | 5  | 5   | 628:144     | 4.36      |          |        |
| 5-           |                | 6              | 2  | 2      | 2  | 1         | 1  | 1  | 1  | 5  | 4   | 575:144     | 3.99      |          |        |
| 6-           | C <sub>1</sub> | 7              | 2  | 2      | 2  | 1         | 1  | 1  | 1  | 5  | 5   | 620:144     | 4.30      |          |        |
| 7-           |                | 8              | 2  | 2      | 2  | 1         | 1  | 1  | 1  | 5  | 3   | 549:144     | 3.81      |          |        |
| 8-           |                | 9              | 2  | 2      | 2  | 1         | 1  | 1  | 5  | 5  | 5   | 637:144     | 4.42      | 3.99     |        |
| 9-           |                | 10             | 2  | 2      | 2  | 1         | 1  | 1  | 3  | 5  | 5   | 585:144     | 4.05      |          |        |
| 10-          |                | 11             | 2  | 2      | 2  | 1         | 1  | 1  | 1  | 1  | 1   | 490:144     | 3.40      |          |        |



APPENDIX H

1. POST-TESTÜSAL GELİŞİM

Post-test

| Denek No | Grup | Öğretmen ile İlişki |    |    |    | İç Kontrol |    |    |    | Etkileşim Niceliği |    |    |    | Okulda Rahat Olma |    |    |    | Bağımlı Gelişim |     |     |     | Merak |     |     |     | Yaratıcılık |  |
|----------|------|---------------------|----|----|----|------------|----|----|----|--------------------|----|----|----|-------------------|----|----|----|-----------------|-----|-----|-----|-------|-----|-----|-----|-------------|--|
|          |      | I.A.                | B. | C. | D. | 2.A.       | B. | C. | D. | 1.                 | 2. | 3. | 4. | 5.                | 6. | 7. | 8. | 9.              | 10. | 11. | 12. | 13.   | 14. | 15. | 16. | 17.         |  |
| 1-       |      | 5                   | 5  | 4  | 4  | 4          | 3  | 3  | 2  | 1                  | 1  | 1  | 1  | 1                 | 1  | 1  | 5  | 1               | 1   | 1   | 3   | 4     | 3   | 3   | 3   | 4           |  |
| 2-       |      | 5                   | 4  | 4  | 4  | 5          | 4  | 5  | 5  | 1                  | 1  | 1  | 1  | 1                 | 5  | 3  | 4  | 4               | 4   | 5   | 4   | 3     | 3   | 3   | 4   | 4           |  |
| 3-       |      | 5                   | 5  | 4  | 4  | 5          | 4  | 5  | 5  | 5                  | 5  | 4  | 4  | 5                 | 4  | 4  | 5  | 4               | 4   | 5   | 4   | 5     | 5   | 5   | 5   | 5           |  |
| 4-       |      | 5                   | 5  | 5  | 5  | 5          | 4  | 5  | 5  | 1                  | 1  | 1  | 1  | 1                 | 5  | 3  | 5  | 3               | 5   | 5   | 5   | 3     | 3   | 3   | 4   | 4           |  |
| 5-       |      | 5                   | 5  | 5  | 5  | 5          | 5  | 5  | 5  | 5                  | 5  | 5  | 5  | 5                 | 5  | 5  | 5  | 5               | 5   | 5   | 5   | 4     | 4   | 4   | 4   | 5           |  |
| 6-       |      | 5                   | 4  | 4  | 4  | 5          | 5  | 5  | 5  | 4                  | 4  | 1  | 1  | 1                 | 5  | 4  | 5  | 4               | 4   | 4   | 3   | 3     | 3   | 3   | 4   | 4           |  |
| 7-       |      | 5                   | 5  | 4  | 4  | 4          | 5  | 1  | 1  | 5                  | 5  | 5  | 5  | 5                 | 3  | 5  | 5  | 5               | 5   | 5   | 5   | 5     | 5   | 5   | 5   | 5           |  |
| 8-       |      | 5                   | 5  | 5  | 5  | 4          | 5  | 4  | 4  | 5                  | 5  | 5  | 5  | 5                 | 5  | 5  | 5  | 5               | 4   | 5   | 4   | 5     | 5   | 5   | 4   | 5           |  |
| 9-       |      | 5                   | 5  | 5  | 5  | 5          | 5  | 5  | 5  | 4                  | 4  | 5  | 5  | 5                 | 5  | 5  | 5  | 4               | 5   | 5   | 5   | 4     | 4   | 4   | 4   | 4           |  |
| 10-      |      | 5                   | 5  | 5  | 5  | 5          | 5  | 5  | 5  | 5                  | 4  | 5  | 4  | 5                 | 4  | 4  | 5  | 4               | 5   | 5   | 5   | 4     | 4   | 4   | 4   | 4           |  |



|         |      | Mantıksal Bilgi |    |    |    |    |    |       |    |    |    |         |    |    |    |      |    |    |    | Sıralama   |    |    |
|---------|------|-----------------|----|----|----|----|----|-------|----|----|----|---------|----|----|----|------|----|----|----|------------|----|----|
| Sıra No | Grup | E. 1)           | 2) | 3) | 4) | 5) | 6) | F. 1) | 2) | 3) | 4) | G. 1.a) |    |    |    | 2.a) |    |    |    | g)         |    |    |
|         |      |                 |    |    |    |    |    |       |    |    |    | b)      | c) | d) | e) | b)   | c) | d) | e) |            | b) | c) |
| 1-      |      | 5               | 5  | 5  | 5  | 5  | 5  | 4     | 4  | 4  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 29.A. 1.a) | b) | c) |
| 2-      |      | 5               | 5  | 5  | 5  | 5  | 5  | 4     | 4  | 4  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 5          | 5  | 5  |
| 3-      |      | 5               | 5  | 5  | 5  | 5  | 5  | 5     | 4  | 5  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 5          | 5  | 5  |
| 4-      |      | 5               | 5  | 5  | 5  | 5  | 5  | 5     | 5  | 5  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 5          | 5  | 5  |
| 5-      |      | 5               | 5  | 5  | 5  | 5  | 5  | 5     | 5  | 5  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 5          | 5  | 5  |
| 6-      |      | 5               | 5  | 5  | 5  | 5  | 5  | 4     | 4  | 5  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 5          | 5  | 5  |
| 7-      |      | 5               | 5  | 5  | 5  | 5  | 5  | 5     | 4  | 5  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 5          | 5  | 5  |
| 8-      |      | 5               | 5  | 5  | 5  | 5  | 5  | 4     | 4  | 5  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 5          | 5  | 5  |
| 9-      |      | 5               | 5  | 4  | 5  | 5  | 5  | 4     | 4  | 5  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 5          | 5  | 5  |
| 10-     |      | 5               | 5  | 5  | 5  | 5  | 5  | 5     | 4  | 5  | 5  | 5       | 5  | 5  | 5  | 5    | 5  | 5  | 5  | 5          | 5  | 5  |

Group  
Donk



W. D. C. L.

[illegible]



Pre and post-test means of experimental and control groups of 3 and 5 year-olds on each of the four scales of the instrument.

| Child    | I-S.E<br>(23)    | II-P.M<br>(6)    | III.Cog.<br>(90)   | IV.Lan.<br>(25)   | (144 item)         | $\bar{x}_i$ | $\bar{x}$           |
|----------|------------------|------------------|--------------------|-------------------|--------------------|-------------|---------------------|
| 1        | 104              | 26               | 320                | 95                | 545:144            | 3.78        | E <sub>1</sub> .Pre |
| 2        | 102              | 29               | 393                | 92                | 616:144            | 4.28        |                     |
| 3        | 82               | 29               | 307                | 83                | 501:144            | 3.48        |                     |
| 4        | 103              | 29               | 368                | 89                | 589:144            | 4.09        |                     |
| 5        | 73               | 30               | 341                | 84                | 528:144            | 3.67        |                     |
| $\Sigma$ | 464:115<br>=4.03 | 143:30<br>=4.76  | 1720:450=<br>3.84  | 443:125<br>=3.54  | 2779:720=<br>3.859 | 3.86        |                     |
| 6        | 86               | 28               | 398                | 87                | 599:144            | 4.16        | C <sub>1</sub> .Pre |
| 7        | 68               | 24               | 350                | 79                | 521:144            | 3.62        |                     |
| 8        | 33               | 30               | 406                | 92                | 621:144            | 4.31        |                     |
| 9        | 107              | 20               | 329                | 90                | 555:144            | 3.85        |                     |
| 10       | 68               | 26               | 319                | 64                | 477:144            | 3.31        |                     |
| $\Sigma$ | 422:115<br>=3.67 | 137:30=<br>4.566 | 1802:450=<br>4.004 | 412:125<br>=3.296 | 2773:720=<br>3.85  | 3.85        | 3.86                |

| Child    | I-S.E<br>(23)    | II-P.M<br>(6)   | III.Cog.<br>(90)   | IV.Len.<br>(25)  | (144 item)        | $\bar{x}_i$ | $\bar{x}$            |
|----------|------------------|-----------------|--------------------|------------------|-------------------|-------------|----------------------|
| 1        | 785              | 29              | 354                | 96               | 594:144           | 4.05        | E <sub>1</sub> .Post |
| 2        | 124              | 30              | 412                | 97               | 643:144           | 4.47        |                      |
| 3        | 97               | 30              | 343                | 88               | 558:144           | 3.87        |                      |
| 4        | 106              | 30              | 400                | 92               | 628:144           | 4.36        |                      |
| 5        | 92               | 30              | 364                | 89               | 573:144           | 3.99        |                      |
| $\Sigma$ | 501:115=<br>4.38 | 149:30=<br>4.97 | 1873:450=<br>4.162 | 462:125=<br>3.70 | 2987:720=<br>4.15 | 4.15        |                      |
| 6        | 92               | 30              | 406                | 92               | 620:144           | 4.30        | C <sub>1</sub> .Post |
| 7        | 75               | 29              | 365                | 80               | 549:144           | 3.81        |                      |
| 8        | 100              | 30              | 411                | 96               | 637:144           | 4.42        |                      |
| 9        | 114              | 30              | 347                | 92               | 583:144           | 4.05        |                      |
| 10       | 70               | 27              | 328                | 65               | 490:144           | 3.40        |                      |
| $\Sigma$ | 541:115=<br>4.72 | 146:30=<br>4.87 | 1857:450=<br>4.126 | 425:125=<br>3.4  | 2879:720=<br>3.99 | 3.99        | 4.07                 |



| Child    | I-S.E<br>(23)    | II-P.M<br>(6) | III.Cog.<br>(90)  | IV.I.M.<br>(25)  | (144 item)        | $\bar{x}_i$ | $\bar{x}$           |
|----------|------------------|---------------|-------------------|------------------|-------------------|-------------|---------------------|
| 1        | 75               | 30            | 413               | 86               | 665:144           | 4.201       | E <sub>2</sub> .Pre |
| 2        | 88               | 30            | 428               | 89               | 635:144           | 4.410       |                     |
| 3        | 100              | 30            | 429               | 107              | 666:144           | 4.625       |                     |
| 4        | 90               | 30            | 412               | 96               | 628:144           | 4.361       |                     |
| 5        | 99               | 30            | 432               | 110              | 671:144           | 4.659       |                     |
| $\Sigma$ | 452:115=<br>3.93 | 150:30=<br>5  | 2114:450=<br>4.70 | 488:125=<br>3.90 | 3264:720=<br>4.45 | 4.451       |                     |
| 6        | 93               | 30            | 440               | 108              | 671:144           | 4.659       | C <sub>2</sub> .Pre |
| 7        | 102              | 30            | 438               | 114              | 684:144           | 4.75        |                     |
| 8        | 106              | 30            | 442               | 108              | 686:144           | 4.764       |                     |
| 9        | 104              | 30            | 431               | 112              | 677:144           | 4.701       |                     |
| 10       | 106              | 30            | 442               | 118              | 696:144           | 4.833       |                     |
| $\Sigma$ | 501:115=<br>4.37 | 150:30=<br>5  | 2193:450=<br>4.87 | 560:125=<br>4.48 | 3414:720=<br>4.74 | 4.741       | 4.596               |

| Child    | I-S.E<br>(23)    | II-P.M<br>(6) | III-Occ.<br>(90)  | IV-L.in.<br>(25) | (144 item)        | $\bar{x}_i$ | $\bar{x}$            |
|----------|------------------|---------------|-------------------|------------------|-------------------|-------------|----------------------|
| 1        | 87               | 30            | 429               | 92               | 638:144           | 4.43        | E <sub>2</sub> .Post |
| 2        | 95               | 30            | 438               | 95               | 658:144           | 4.57        |                      |
| 3        | 106              | 30            | 437               | 111              | 694:144           | 4.75        |                      |
| 4        | 100              | 30            | 442               | 100              | 681:144           | 4.73        |                      |
| 5        | 109              | 30            | 442               | 121              | 702:144           | 4.88        |                      |
| $\Sigma$ | 497:115=<br>4.32 | 150:30=<br>5  | 2188:450=<br>4.86 | 528:125=<br>4.22 | 3363:720=<br>4.67 | 4.67        |                      |
| 6        | 95               | 30            | 442               | 112              | 679:144           | 4.72        | C <sub>2</sub> .Post |
| 7        | 102              | 30            | 441               | 121              | 694:144           | 4.82        |                      |
| 8        | 109              | 30            | 442               | 111              | 692:144           | 4.81        |                      |
| 9        | 107              | 30            | 435               | 118              | 690:144           | 4.80        |                      |
| 10       | 106              | 30            | 444               | 120              | 700:144           | 4.86        |                      |
| $\Sigma$ | 519:115=<br>4.51 | 150:30=<br>5  | 2204:450=<br>4.89 | 582:125=<br>4.65 | 3455:720=<br>4.78 | 4.80        | 4.74                 |

APPENDIX J

Each child's interjudge reliability raw score on each item for 3 year-olds.

| Scales of the Instrument | Item No | Child No |         |   |     |   |     |   |   |     |    |
|--------------------------|---------|----------|---------|---|-----|---|-----|---|---|-----|----|
|                          |         | 1        | 2       | 3 | 4   | 5 | 6   | 7 | 8 | 9   | 10 |
| I. SOCIO-EMOTIONAL       | I.A.    | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | B.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | C.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | D.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 2.A.    | +        | 5-4 (1) | + | +   | + | +   | + | + | +   | +  |
|                          | B.      | +        | +       | + | 4-5 | + | +   | + | + | +   | +  |
|                          | C.      | +        | +       | + | +   | + | +   | + | + | 5-4 | +  |
|                          | D.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 3.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 4.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 5.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 6.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 7.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 8.      | +        | +       | + | +   | + | 5-4 | + | + | +   | +  |
|                          | 9.      | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 10.     | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 11.     | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 12.     | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 13.     | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 14.     | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 15.     | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 16.     | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 17.     | +        | +       | + | +   | + | +   | + | + | +   | +  |
| II. PHYSICAL MOTOR       | 18.     | +        | +       | + | +   | + | +   | + | + | +   | +  |
|                          | 19.     | +        | +       | + | +   | + | +   | + | + | +   | +  |

(1) These are the two independent interscorers' scores which are not in concordance.



[illegible]



[illegible]





APPENDIX K

Each child's interjudge reliability raw score on each item for 5 year-olds.

| Scales of the Instrument | Item No | Child No |   |     |     |     |     |     |            |   |     |
|--------------------------|---------|----------|---|-----|-----|-----|-----|-----|------------|---|-----|
|                          |         | 1        | 2 | 3   | 4   | 5   | 6   | 7   | 8          | 9 | 10  |
| I. SOCIO-EMOTIONAL       | 1.A.    | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | B.      | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | C.      | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | D.      | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 2.A.    | +        | + | +   | +   | +   | +   | +   | (1)<br>3-4 | + | +   |
|                          | B.      | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | C.      | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | D.      | +        | + | 5-4 | +   | +   | +   | +   | +          | + | +   |
|                          | 3.      | +        | + | +   | 3-2 | +   | +   | +   | +          | + | +   |
|                          | 4.      | +        | + | +   | +   | 5-4 | +   | +   | +          | + | +   |
|                          | 5.      | +        | + | +   | +   | +   | 4-3 | +   | +          | + | +   |
|                          | 6.      | +        | + | +   | +   | +   | +   | +   | +          | + | 4-3 |
|                          | 7.      | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 8.      | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 9.      | +        | + | +   | +   | +   | 4-3 | +   | +          | + | +   |
|                          | 10.     | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 11.     | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 12.     | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 13.     | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 14.     | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 15.     | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 16.     | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 17.     | +        | + | +   | +   | +   | +   | 5-4 | +          | + | +   |
| II. PERCEPTUAL MOTOR     | 18.     | +        | + | +   | +   | +   | +   | +   | +          | + | +   |
|                          | 19.     | +        | + | +   | +   | +   | +   | +   | +          | + | +   |

(1) These are the two independent interscorers' scores which are not in concordance.

[illegible]





[illegible]

[illegible]