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ABSTRACT

This document collects the appendices to the Pre-primary Education report of Study Project Europe 2000 of the European Cultural Foundation. This study collected data on the psychological, sociological, and educational aspects of pre-primary educational systems in England, France, Italy, Sweden, and the Federal Republic of Germany. (CS)

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General information.

I A. Legal regulations.

- 1) What institutions \* ) for p.p.e. do you know in your country? Which of them have been legally regulated?

Institutions	age group	legally regulated yes/no	which ministry	since
1 Nursery schools	3-5	yes	Education	1918
2 Nursery classes	3-5	yes	Education	+1930
3 Day Nurseries	0-5	yes	Health and	) 1948
4 Preschool Playgroups	3-5		Social security)	

- 2) Is there a shift of the responsibility 2) for p.p.e. between ministries? No.
- 3) Is there a tendency to start regulating also the institutions without legal regulation and if so, in which year do you expect it to occur?  
There is a tendency to try to enforce existing regulations for child minding-play groups fall into this category officially-rather than to create new regulations.
- 4) Is participation in one or more institutions obligatory? No.
- 5a) Are there advisory bodies with regard to the legislation for p.p.c.?  
Central Advisory Council on Education  
Set up to consider specific areas of education from time to time. Has reported on preschool (and primary) education twice: 1923 and 1967.
- 5b) Are (other) advisory bodies 3) with regard to the legislation for p.p.e. being planned? No.

I B. Form of organization of p.p.e.

- 1) How have the ages, the visiting hours and the proportion between playing-, learning- and resting-times in the various institutions for p.p.e. been regulated?

Institutions	ages	visiting hours	ratio between playing/learning/ resting times
Nursery schools )	nation.	Local Educa- tion Authority	) Responsibility
Nursery Classes )			
Day Nurseries )		L.E.A.	) Individual head (%)
Preschool Play groups )		Local Department of Social Services)	
		Individual leaders decide	)

2) Is there a tendency to make a change in one of the above mentioned categories?

ages	no	reason
visiting hours	yes	reason more half day as opposed to full day provision to deal with shortage of places
ratio between times for play/learning/rest	yes	reason decline in compulsory rest period

3a) What is the legal admission age 4) for the primary school? 5) Five.

3b) Is earlier admission 6) possible? If so, how? Yes. The headteacher may admit children at the beginning of the schoolyear in which the child reaches the age of five if room available.

3c) How many times in a year is admission possible and on what conditions? Three times. At the beginning of each schoolyear.

4a) Is readiness for school tested when the child enters the primary school, before the child enters the primary school? No.

5a) Are special measures taken for children who are not ready for school? No.

5b) May new measures be expected? Yes. If so, what measures? More emphasis on helping deprived children when they start school.

6a) Is there in your country a need/desire to change the transition from forms of p.p.e. to primary education? No.

6b) May changes be expected in the regulations for the transition of forms of p.p.e. to primary education? No.

7) Has p.p.e. been incorporated into a total school structure? Yes, but only for a very small university of children.

I C. Management of the institutions.

1) Who is responsible for the administration of the institutions for p.p.e.?

Institutions	public bodies state/province/municipality	private organizations association, business etc.
	%	%
1. Nursery schools	) 1+2+4	1+2+4: 40
2. Nursery Classes	) approx. 60%	
3. Day Nurseries	No figures available	
4. Preschool playgroups		

2) How do you typify the administration in your country as regards the institutions for p.p.e.?

Types of management	Now	In the future
1 centralization on governmental level		
2 decentralization on governmental level	x	
3 centralization on private level		
4 decentralization on private level	x	

Comments, if any. Mixture of these (x) categories

- 3) To what extent does private initiative remain possible besides management on a governmental level?  
Extensively - Playgroup or private nursery schools may be set up so long as they comply with certain regulations
- 4) What share have the parents in the management 7) and in the execution of the management 7) in the institutions?

Institutions	management		execution	
	direct share	indirect share	direct share	indirect share
1 Nursery schools		none		x
2 Nursery Classes		none		x
3 Day Nurseries		none		x
4 Preschool Playgroups	x		x	

\* Depends on heads in individual institutions.

II. Statistics 8).

A. Financing 8)

- 1) How is the budget for p.p.e. in your country divided into the following items? Information is not available since the largest category (nursery classes) is a part of the primary school system for budgetary purposes.
- 2) May important changes be expected in the above division? If so, what changes. No.
- 3) Is public p.p.e. fully financed? Yes.

II B. Subsidizing 9)

- 1) To what extent are the private institutions for p.p.e. subsidized?

Institutions

Subsidies in %

Preschool Play groups

Varies according to local authority - No national figures available.

- 2) What subsidy standards apply to the private institutions for p.p.e. as regards: As above.
- 3) Are there indications to the effect that subsidy schemes impede or promote participation of children in p.p.e.?  
Promoting due to: Provision of additional places due to aid to private or voluntary organisation.

4) Are further special subsidies granted by other ministries?

Institutions	Ministry of	Special subsidy for
1. Nursery schools	Home office/ Education	Areas with high per- centage of immigrants
2. Nursery classes	"	" "
3. Day nurseries	"	" "
4. Preschool Playgroups	"	" "

III. Inspection 10).

1) Are there medical, hygienical and pedagogical inspections for p.p.e.

Institutions	Medical/hygienical/inspections	Pedagogical inspection
1. Nursery schools	yes	yes
2. Nursery classes	yes	yes
3. Day nurseries	yes	informally only
4. Preschool play groups	yes	" "

2) Is pedagogical inspection more emphasized in your country or is it going to be so?

	Medical/hygienical inspection	Pedagogical inspection
Emphasis is now on	In D.N.'s and P.P.G.'s	In N.S.'s and N.C.'s
Emphasis will be on		In all institutions

IV Objectives.

1) What objectives would you indicate as the most important ones per age and per institution?

Institution/ ages	medical/ hygienic	cognition	social/ emotional	other
1 nursery school ....years ....years	3	2	1	
2 nursery classes ..years ..years				
3 day nurseries 0-3 years 3-5 years	1 practice changing	3 away from care	2 towards educa- tion	(depends on individual institution
4 preschool play groups ..years	3	2	1	

2) Are there tendencies to change the priority of the objectives per institution in view of the future.

Institution	medical/hygienic	cognition	social/emotional	other
1 Nursery schools		slightest tendency to increase emphasis of cognition		
2 Nursery classes		" "		
3 Day nurseries	move away from medical			
4 Preschool/play groups	hygienic no			

3) Are there also certain objectives per institution for children from socio-economic deprived groups?

Institutions	Specific objectives (for instance: influencing of families, improvement of the transition possibilities in respect of primary education in underprivileged environmental groups etc.)
1 Nursery schools	Yes
2 Nursery classes	Yes
3 Day nurseries	Yes
4 Preschool play groups	Yes

3b) Or have special reception facilities been created for these special groups? No.

3c) Do you expect that (more) separate institutions will be established in the future for the reception of socio-economic groups? No.

Reason: Because the overriding philosophy is one which is opposed to separate institutions for different socio-ec. groups.

4) Are you of opinion that a total conception of objectives is being realized by means of the various institutions for p.p.e.? No. There is a coherent set of goals and aims here.

5a) Who now have the greatest influence per institution as regards the laying-down of the objectives.

Institutions

- 1 Nursery schools Head teacher
- 2 Nursery classes Head teacher
- 3 Day nurseries Superintendent
- 4 Preschool playgroups Those in charge of groups

5b) Are there indications of a shift of influences as regards the layingdown of the objectives? No.

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V A. Statistical data (pupils)

1) What percentage of the total number of the ages groups 2 to 7 is following/followed a form of p.p.e.?

<u>Age group</u>	<u>1960</u>	<u>1965</u>	<u>1969/1970</u>	
2 years	not available	0,3	0.3	%
3 years )		10	± 15	%
4 years )				

2) What percentage of the total number of children of the age groups 5 to 7 is following/followed primary instruction?

<u>Age group</u>	<u>1960</u>	<u>1965</u>	<u>1969/1970</u>	
5 years	100	100	100	%
6 "	100	100	100	"
7 "	100	100	100	"

3) Is the influence of p.p.e. being/examined in connection with the results of primary instruction? Yes.  
If so, can you mention the results of the investigation?  
Not yet complete.

V B. Statistical data (institutions).

1) Can an increase of the number of institutions for p.p.e. be found in the last few years?  
Please confirm by means of figures.

<u>Institutions</u>	<u>1960</u>	<u>1965</u>	<u>1969/1970</u>
1 Nursery schools	--	increase	± 10%
2 Nursery classes	--	" "	" 25%
3 Day nurseries	no increase		
4 Preschool play groups		" "	

2) What size 12) have the groups per institution?

<u>Institutions</u>	<u>size of the group</u>		<u>(number of children)</u>
	legal	real average	desirable Depends on qualifications of staff.
1 Nursery schools	varies		
2 Nursery classes	30 max.	± 25	
3 Day nurseries	varies according to age		
4 Preschool/play groups	none	large variation	

3) Are there enough institutions in view of the need for p.p.e.?  
No.

If not, for what numbers of children p.p.e. is considered as desirable and how many institutions will be needed (estimates acceptable?)

As far as educational provision is concerned in N.S.'s and N.C.'s the Plowden Report recommended places for 85% of the 3-5 age group. Need for D.N.'s is hard to increase. Playgroups would become redundant with universal nursery education.

4) Can the numbers of new institutions be stated, which have been planned in connection with the above mentioned shortages? No.

5) Is there a difference between attendance of institutions for p.p.e. in the town and in the country?

Yes, rural countries have very little provision.

VI A. Staff (general)

1) What division applies to the training of employees for the institutions for p.p.e.?

Employees	Admission age	Required preliminary training	Duration of the training	Ratio general education/professional study
1 Teachers 13)	18		3	entirely professional
2 Assistants 14)	16		2	" " "

2) Can you mention the principal subjects for the professional training, if possible, in the order of their importance?

Teachers: Varies according to academic specialist subject chosen.

4) Who are working as a rule per group of children in the various institutions?

Institutions	Teacher	Assistant	Teacher and assistant	Otherwise
1 Nursery school			x	
2 Nursery classes			x	
3 Day nurseries				Trained nurse + assistant
4 Preschool/playgroups				Various
5 .....				

5) Is there a tendency to change the training of employees for institutions for p.p.e.? If so, in which way.

Employees: 1 Teacher - No.

2 Assistant - 1 year courses for mature women.

6) Is the training of teachers for p.p.e. equal or to a high degree equal to the training of primary school teachers.

Equal: Yes.

- 7) Are measures being prepared in order to integrate the training of teachers for p.p.e. with the training of primary school teachers? Already integrated.
- 8) Is it possible for men to be trained as a teacher for p.p.e.?  
 Yes.  
 If so, is this possibility used? Not used.  
 If not, is it going to be possible in the future.  
 Depends on whether we escape from current sex-role typing.

VI B. Staff (salary)

- 1) What is the amount of the salary of employees for p.p.e. as compared with the salary of primary school teachers in:

	first year of service	maximum number of years of service
salary of primary school teacher	100%	100%
salary of teacher for p.p.e.	100%	100%
salary of assistant for p.p.e.	± 70%	± 50%

- 2) Has in opinion the salary of teachers for p.p.e. a favourable/impeding influence on being trained for p.p.e. and on practising this profession? No evidence available.
- 3) Is there a tendency to level the salaries (if they are differing)? No.

VII. Building.

- 1) Which rooms are obligatory in the various institutions for p.p.e.?

Institutions	Rooms for						
	playing	learning	sleeping	washing	doctor	observation	staff
1 Nursery schools	x			x			x
2 Nursery classes	x			x			x
3 Day nurseries	x			x			x
4 Preschool/play-groups	x			x			

\* Special playrooms not required - Outside playspace required except for P.P.G.'s.

- 3) Is a flexible use of the available room taken into consideration when institutions for p.p.e. are being built (in connection with the application of modern methods)? For instance: by means of modern building materials. Yes.
- 4) To what extent are institutions for p.p.e. being built as parts of complexes of schools? Frequently.

- 5a) If the institutions for p.p.e. haven not been incorporated in complexes of schools, are there nevertheless common facilities? No.
- 5b) Are there facilities which in your opinion can/should be made jointly? Yes.  
If so, what facilities?  
All P.P.G.'s should where possible be able to recieve advise from trained teachers. Teachers should be appointed to have responsibility for groups of play groups.
- 6) Is there in your country an information-centre for the building of schools? The central government lays down standards and provides information to L.E.A.'s
- 7a) Has the building of institutions for p.p.e. been incorporated, in a number of cases, in a building-scheme for a quarter of-a town (for instance in the centre of such a quarter)? Yes.  
Primary schools have been planned in this way and N.C.'s are sometimes included in them.
- 7b) Are there indications to the effect that changes will be made in the next few years? Yes.  
What changes? More institutions combining D.V.'s N.S.'s and P.P.G.'s
- 8a) Are certain principles being applied in connection with the regional and national planning of institutions for p.p.e.? Yes.  
What principles? Development only allowed when provision releases a certain proportion of mothers to return to teaching, or when school or class serves deprived urban area (which has been designated as such.
- 8b) Do you expect changes in the near/remote future? No.

VIII. Modern methods. (general)

1) How would you typify education in general in your country?

	chiefly class tuition	possibilities of individualization and differentiation	individualized instruction
primary education		x	
p.p.e.			x

2) Which of the following trends influence p.p.e. in your country?

- Montessori  
Fröbel  
Psycho-analysis (indirectly)  
Piaget's psychology

- 3) Can an increasing influence of certain trend be found in the last few years? Uncertain.
- 4) Who have chiefly introduced new methods in the last few years?  
Teachers themselves and the inspectorate for curricular innovation.
- 5a) To which domains of the development of children do you direct yourself(ves) in your p.p.e.?

<u>Domains</u>	<u>nursery school</u>	
1. cognition	2	
2. emotional	1	* Slight differences
3. aesthetic/creative	2	Thereby it is hard to
4. social	1	generalise about such
5. function training	1	matters in a highly

5b) Do you expect shifts in the next few years?

Domains

nursery school

1. cognition

more emphasis

5c) Will these shifts be regulated legally? No.

6a) How would you typify at this moment the presentation of the subjects or the material per institution?

Institution	a)systematic	b)exemplary	c)combination of a and b	d)entirely free	e)other typification
1 Nursery schools					x
2 Nursery classes					x
3 Day Nurseries					x
4 Preschool/playgroups.				x	

\* Mostly free with a little exemplary and systematic work.

6b) Do you expect changes? Some increase in systematic and exemplary presentation in all types of institutions.

7) How would you typify the group composition now and for the future in the institutions for p.p.e.?

Institutions	now		future	
	graded	non graded	graded	non graded
1 Nursery schools		x		x
2 Nursery classes		x		x
3 Day nurseries		x		x
4 Preschool/ playgroups		x		x

VIII.B. Methods (fields of development)

1) Have the institutions for p.p.e. in your country fixed timetables? No.

A. Preparatory language instruction.

2) What is being done in preparatory language instruction?

N.B.: All institutions spend sometime in informal language instruction.

N.S.'s and N.C.'s do more than D.N.'s and P.P.G.'s in general.

3a) Is a second language being taught in one of the institutions for p.p.e.?

If so, which second language and who is teaching? No.

3c) Do you expect introduction of a second language in p.p.e. in the future? No.

B. Preparatory teaching of arithmetic.

4) What is being done in preparatory teaching of arithmetic?

	counting	concept of quantity	theory of set modern mathematics
younger group 2-3		x	
middle group 3-6	x	x	
older group 5-7			
primary education	x	x	x

C. Creative/aesthetic.

5a) Children do spend time.

<u>Fields</u>	<u>much/</u>	<u>moderately/</u>	<u>little</u>
a) painting	x		
b) modelling in clay		x	
c) playing musical instruments		x	

5b) Are relations with other subjects being made or are relations with other subjects/fields the starting-points?

<u>Fields</u>	<u>yes/</u>	<u>hardly/</u>	<u>no</u>
preparatory arithmetic	x		
" " language	x		
function training	x		
emotionality			

D. Function and motor training.

6) What functions do you exercise?

- 1 observation
- 2 motor action
- 3 hearing
- 4 touch

E. Social emotional education.

7) How do you evaluate the social/emotional education of the child?

<u>now</u>			<u>future</u>		
<u>important</u>	<u>moderate</u>	<u>unimportant</u>	<u>important</u>	<u>moderate</u>	<u>unimportant</u>

F. Audio-visual Aids.

9) Which audio-visual aids are being used?

	now	future		now	future		now	future
radio	x	x	tape-recorder	x	x	language laboratory		?
television		?	film		?	teaching machine		?

Even use of radio's and tape-recorders is uncommon at present with children under five.

IX. Experiments and research.

IX A. Research.

1) In what domains research 15) is being effected at the moment?

Domains	Total number of children of 2 to 7 years subjected to the research	
compensation program	x	A few hundred in each
verbal stimulation	x	project usually
influencing of families		
influencing of environment		
general cognition	x	
function training	x	

2) Who are researching?

	much	moderately	little
University institutions			x
Training colleges			x
Educational research centres			x
Via ministries of education social affairs, health			
Private institutions			

3a) Are there mutual contacts between the researching bodies?  
Few.

3b) Do you expect an increase of the contacts in the future?  
If so, reason. Yes, since there is growing interest in the field.

5a) Is there a tendency to shift the research to one or more particular institutions? No.

5b) Is the government planning a special institutions for research in p.p.e.? No.

6a) Who chiefly finance the research in the field of p.p.e.?  
Government.

6b) Is there an increase of the financing of the research by the government? Moderate.

IX B. Experiments 16)

- 1) In which domains experiments are being made with the results of research? Only experiments as part of research or without any basis in research.
- 12) Via which media and to what extent is publicity being given to the result of research and experiments?

<u>Research</u>	<u>much/</u>	<u>little/</u>	<u>moderate</u>
mass media			
daily papers		x	
periodicals			x
professional periodicals			x

X. Planning.

- 1) What bodies now provide for the planning 17) of p.p.e. and what tasks do they especially fulfil in this planning?

Bodies	tasks	
	chiefly quantitative planning	chiefly qualitative
1 Department of Education and Science	x	
2 Schools Council		x

- 2a) ~~Is there a tendency to the taking over of one of both or of both kinds of planning by a national general body for p.p.e.?~~  
No.
- 2b) Is a legal regulation for such an operation being prepared?  
No.
- 3) Which groups plead for a better planning of p.p.e. (Please number in the order of importance).

departmental officials	In a situation where a very small proportion of the age group obtain preschool education concern is not with planning as such but expansion.
social groups	
teachers	
educationalists	
psychologists	
primary schools	All the groups listed (except departmental officials) publicly plead for expansion particularly parents.
parents	

- |                 |  |
|-----------------|--|
| Nursery Schools | - Autonomous institutions with their own heads   |
| Nursery Classes | - Institutions attached to primary schools and under the auspices of the primary head  |
| Day Nurseries   | - Institutions for the care of preschool children whose parents are unable to care for them for one reason or another (e.g. one parent-families) Not part of the educational system. |

Preschool-playgroups - Set up in large numbers since the early sixties mainly by parents of preschool age children to counteract the shortage of places in schools and classes. Many organisations now run playgroups such as Community Relations Committees and various charities as well as groups of parents.

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O.I.'72/446.

General informationI A. Legal regulations

- 1) What institutions \*) for p.p.e. do you know in your country? Which of them have been legally regulated?

Institutions	age group
1 Ecoles maternelles	2 - 6
2 classes enfantines	2 - 6
3 sections enfantines	2 - 6

I C. Management of the institutions

- 1) Who is responsible for the administration of the institutions for p.p.e.?

Institutions	public bodies state/province/ municipality	private organizations association, etc.
1 classes maternelles	98%	2%
2 classes enfantines	48%	52%
3 sections enfantines	83%	17%

V A. Statistical data (pupils)

- 1) What percentage of the total number of the ages groups 2 to 7 is following/followed a form of p.p.e.?

Age group	1960/61	1965/66	1967/68	1970/71
2 years	10	11	14	18%
3 "	6	45	51	61%
4 "	63	74	80	87%
5 "	61	81	89	94%
6 "	2.1	1.6	1.9	1.6%

- 2) What percentage of the total number of children of the age group 5 to 7 is following/followed primary instruction?

Age group	1960/61	1965/66	1967/68
5 years	30	16	10 %
6 "	97	98	98 %
7 "	99	99	99 %

V B. Statistical data (institutions).

- 1) Can an increase of the number of institutions for p.p.e. be found in last few years?

Please confirm by means of figures.

Institutions	1960/61	1965/66	1967/68
1 Ecoles maternelles	6159	7445	8037
2 classes enfantines			
3 sections enfantines			

2) What size 12) have the groups per institution? (1967/68 - public institutions)

Institutions	size of the group (number of children)		
	legal	real average	desirable
1 Classes maternelles Nursery school		43.4	
2 Classes enfantines		35.8	

3) Are there data available about of assistants/teachers working in the various institutions for p.p.e.?

Public Institutions	Numbers of teachers*		
	1960/61	1965/66	1967/68
1 Classes maternelles	20144	26873	30065
2 Classes enfantines	6232	6226	6651

\* full employment

Ecoles maternelles

Classes enfantines - attached to a primary school or a "lycée".

Section enfantines - of a primary class

General informationI A. Legal regulations

1) What institutions \*) for p.p.e. do you know in your country? Which of them have legally regulated?

Institutions	age group	legally regulated yes/no	which ministry	since
1 Nursery school Kindergarten 1)	3-6	Yes	Kultusministerien or Sozialministe- rien of the Länder	
2 Day Care Centres	3(2)-15	Yes		
3 Vorklassen	5-6	Yes	Kultusministerien of the Länder	1968
4 Eingangsstufen	5-7	Yes	Kultusministerien of the Länder	1968

2) Is there a shift of the responsibility 2) for p.p.e. between ministries?

Institutions	first under the ministry of	to the ministry of	as from
1 Nursery school Kindergarten 1)	Sozial minis- terium	Kultus (Education)- Ministerium	different for the Länder and the cities since the second worldwar

4) Is participation in one or more institutions obligatory?

Institutions	obligatory	not obligatory	since	reason
1 Nursery school Kindergarten 1)		x		
2 Day Care Centers		x		
3 Vorklassen		x		
4 Eingangsstufen		x		

IB. Form of organization of p.p.e.

1) How have the ages, the visiting hours and the proportion between playing-, learning- and resting-times in the various institutions for p.p.e. been regulated?

Institutions	ages	visiting hours	ration between playing/learning/ resting times
1 Nursery school Kindergarten 1)	varies	varies	not fixed

Laid down f.e. by "Jugendwohlfahrtsbehörden"

2) Is there a tendency to make a change in one of the above mentioned categories?

ages	3 - 5	reason when "the Strukturplan des Bil- dungsrats" is realized
visiting hours		reason
ratio between times for /learning/rest		reason

- 3a) What is the legal admission age 4) for the primary school? 5)  
6 years at 30 June for school begin at 1 August.
- 3b) Is earlier admission 6) possible? If so, how?  
6 months if the child is intellectual and physical ready for school.
- 3c) How many times in a year is admission possible and on what conditions?  
one time in a year.
- 4a) Is readiness for school tested when the child enters the primary school, before the child enters the primary school?

yes / ~~no~~

If so, what procedure is followed?

readiness test in most areas

- 4b) What percentage of the total number of children of school age is tested for readiness for school?

Unknown

- 4c) Can you group the results of the tests?

ready for the primary school		not ready for school	
5 years } 95-90 %		5 years } 5-10 %	
6 " }		6 " }	
7 " (number)		7 " (number)	

- 5a) Are special measures taken for children who are not ready for school?

In many cities: Schulkindergärten (or Vorklassen in Hessen)  
since: different (in Hamburg since the twenties)

Schulkindergärten	1959	1969	
Schulkindergärten children	245 5.626	1.023 22.190	+ 273,5%
children in the first class of the primary school	777.566	1.062.807	+ 36.6%
children of school-age	58.300	79.600	+ 36.5%
% in Schulkindergärten	9.7%	27.9%	+ 18.2%

- 5b) May new measures be expected?  yes/ no

If so, what measures? a. special-kindergarten for defective children  
b. Perhaps "Eingangsstufen" for 5-7 years old children when children have to go at school at 5 (1980-1985)

- 6a) Is there in your country a need/desire to change the transition from forms of p.p.e. to primary education?

yes/ no

The "Eingangsstufe" or "Übergangsguppe" of the Kindergarten.

- 6b) May changes be expected in the regulations for the transition of forms of p.p.e. to primary education?

yes/ no

If so, what changes?

Legal regulations of "Eingangsstufen".

7) Has p.p.e. been incorporated into a total school structure?

Experiments with "Eingangsstufen" and "Vortlassen"  
(Hamburg, Berlin, Hessen, Nordrhein-Westfalen)

IC. Management of the institutions

1) Who is responsible for the administration of the institutions for p.p.e.?

Institutions	public bodies state / province / municipality	private organizations association, business etc.
1 Nursery school Kindergarten 1)	25 %	75 %
2 day care centers		
3 Vorklassen	100% (as	
4 Eingangsstufen	schoolexperiments)	

2) How do you typify the administration in your country as regards the institutions for p.p.e.?

Types of management	Now	In the future
1 centralization on governmental level	x 1)	x
2 decentralization on governmental level		
3 centralization on private level	x	?
4 decentralization on private level		

Comments, if any. 1) refers to the schoolexperiments and 256 governmental Kindergarten

4) What share have the parents in the management 7) and in the execution of the management 7) in the institutions?

Institutions	management		execution share	
	direct share	indirect share	direct share	indirect
1 Nursery school Kindergarten 1)		x 1)		
2 . . . . .				
3 . . . . .				
4 . . . . .				
5 . . . . .				

1) There are not many Kindergartens private organized and payed by communities of parents.

II. Statistics 8).

A. Financing 8).

1) How is the budget for p.p.e. in your country divided into the following items? Relevant figures are not available.

3) Is public p.p.c. fully financed?

yes/no

If not, what contribution is claimed from others?

parents	Parentsfree depends on income of family % or sum of money
---------	---

4) Have you indications to the effect that full financing will be introduced within a measurable time?

Certainly in those backward areas where full financing is almost realized.

IIB. Subsidizing 9)

1) To what extent are the private institutions for p.p.c. subsidized?

Relevant figures are not available at the moment.

III. Inspection 10)

1) Are there medical, hygienical and pedagogical inspections for p.p.c.?

Institutions	Medical/hygienical inspections	Pedagogical inspection
1 Nursery schools Kindergarten 1)	yes	not in the meaning of schoolinspection
2 Day care centers	yes	
3. Vorklassen	yes	yes
4 Eingangsstufen	yes	yes

2) Is pedagogical inspection more emphasized in your country or is it going to be so?

	Medical/hygienical inspection	Pedagogical inspection
Emphasis is now on	x	
Emphasis will be on	x	x

3) Are data obtained by inspection used in the planning of the training and the in service-training 11) of teachers?

yes/no

IV. Objectives

1) What objectives would you indicate as the most important ones per age and per institution?

Institution/ages	medical/hygienic	cognition	social/emotional	other
1 nursery school + D.C.C. 3-5 years 5-6 years	x		x	
2. Vorklassen	x	x	(x)	
3. Eingangsstufen	x	x	(x)	

2) Are there tendencies to change the priory of the objectives per institution in view of the future.

Institution	medical/hygienic	cognition	social/emotional	other
1 Nursery school Kindergarten 1)		x		
2 . . . . .		x		
3 . . . . .				
4 . . . . .				
5 . . . . .				

3a) Are there also certain objectives per institution for children from socio-economic deprived groups?

Institutions	specific objectives (for instance: influencing of families, improvement of the transition possibilities in respect of primary education in underprivileged environmental groups etc.)
1 Nursery school Kindergarten	Language stimulation for prejudiced children Stimulation of learning motivation Educational activities for groups Involvement of parents
2 Day Care Centres	
3 Vorklassen	
4 Eingangsstufen	
5 . . . . .	

3b) Or have special reception facilities been created for these special groups?

yes/no

3c Do you expect that (more) separate institutions will be established in the future for the reception of socio-economic groups?

No separate institution; one does expect systematical stimulation programs for all children.

5a) Who now have the greatest influence per institution as regards the laying-down of the objectives (please numer in the order of importance)

Institutions	child-psychologists/ educationalists	society	the primary school with its requirements
1 Nursery school Kindergarten 1)	x	(x)	
2 Day Care Centres	x	(x)	
3 Vorklassen		(x)	x
4 Eingangsstufen		(x)	x

5b) Are there indications of a shift of influences as regards the laying-down of the objectives?

Institutions	from	to
1 Nursery school Kindergarten		society
Day Care Centers		
. . . . .		

VA. Statistical data (pupils)

1) What percentage of the total number of the ages groups 2 to 7 is following/followed a form of p.p.e.?

Age group	1959	1965
2 years		
3 "		
4 "	33%	34.1%
5 "		

2) What percentage of the total number of children of the age group 5 to 7 is following/followed primary instruction?

Age group	1959	1965
5 years 5 - 11	ppe + p.ed. 35.4	28.6
6 "	96.1	96.4
7 "		

3) Is/has the influence of p.p.e. being/been examined in connection with the results of primary instruction?

yes/ no

If so, can you mention the results of the investigation?

Little investigations: Results after half a year no differences between Kindergartenchildren and other pupils.

4) Does the admission age of children for the primary school in your country play a part in connection with staying down?

yes/ no

If so, what is the result of the investigation on which the answer is based?

- 1 Percentage of non-promoted children higher when admission age is lower.
- 2 Percentage of non-promoted children hogher at admission age 5 : 9 - 6 : 3 and at 6 : 9 - 7 : 3.

VB. Statistical data (institutions).

1) Can an increase of the number of institutions for p.p.e. be found in the last few years?

Please confirm by means of figures.

Institutions	1960	1965	1969/70
1 Nursery school Kindergarten 1)		14113	16413

2) What size 12) have the groups per institution?

Institutions	size of the group		number of children desirable
	legal	real average	
1 Nursery school Kindergarten 1)	25	25*	15
2 Day Care Centres			
3 Vorklassen	20/25	23	20
4 Eingangsstufen			

3) Are there enough institutions in view of the need for p.p.e.?

yes/no

If not, for what numbers of children p.p.e. is considered as desirable and how many institutions will be needed (estimates acceptable)?

75% of the age-group (3-5) 100% of the group (5-6).

VIA. Staff (general)

1) What division applies to the training of employees for the institutions for p.p.e.?

Employees	Admission	Required preliminary training	Duration of the training	Ratio general education/professional study
1 Teachers	18	Realschule	2 year	1 : 2
2 Assistants	14	Volksschule	2 year	1 : 1

Jugendleiterinnen after two years practical work another 2 years theoretical training

2) Can you mention the principal subjects for the professional training, if possible, in the order of their importance?

Subjects	Teachers	Assistants
1 Pedagogics of the little child		(3)
2 Child psychology		(4)
3 Youth law		
4 Paediatrics		(1)
5 Practical Work: Kindergarten		
6 Pottering		(2)
7 Foreign language		

3) Are there data available about the number of assistants/teachers working in the various institution for p.p.e.?

Jugendhilfe (private)

	Jugend- leiterin- nen	Kinder- gärtnerin- nen	Kinder- kranken- schwes- tern	Kinder- pflegerin- nen	Helper
a Arbeiterwohlfahrt 1)	51	583	53	421	
b Diakonisches Werk 1)	70	6.977	2.331	3.244	
c Dt. Rotes Kreuz 1)	17	115	85	150	
d Zentralwohlfahrts- stelle der Juden in Dtld 1)	17	40	-		
e Caritas-Verband 2)	214	8.206	110	3.015	8.026

1) (Stand: 31.12.1966)

2) (Stand: 31.12.1967)

4) Who are working as a rule per group of children in the various institutions?

Institutions	Teacher	Assistant	Teacher and assistant	varies
1 Nursery school Kindergarten	x	x	x	
2 Day Care Centres				
3 Vorklassen	x			
4 Eingangsstufen	x			

5) Is there a tendency to change the training of employees for institutions for p.p.e.? If so, in which way.

Employees	Admission age	Required liminary	pre-training	Duration of the training	Ratio general education/professional study
1 Teacher	18	Fachoberschule			

	Term of probation before the training	Term of probation during the training
1 Teacher	none	½ year

6) Is the training of teachers for p.p.e. equal or to a high degree equal to the training of primary school teachers?

Equal:  yes/ no

To a high degree equal:  yes/ no

7) Are measures being prepared in order to integrate the training of teachers for p.p.e. with the training of primary school teachers?

yes/ no

8) Is it possible for men to be trained as a teacher for p.p.e.?

yes/ no

If so, is this possibility used?  not very often used

**VIB. Staff (salary)**

1) What is the amount of the salary of employees for p.p.e. as compared with the salary of primary school teachers in:

	first year of service	maximum number of years of service
Salary of primary school teacher	100%	100%
Salary of Kindergärtnerin	70%	60%
Salary of Jugendleiterin	75-80%	75%

2) Has in opinion the salary of teachers for p.p.e. a favourable/impeding influence on being trained for p.p.e. and on practising this profession?

Impeding/ Favourable

3) Is there a tendency to level the salaries (if they are differing)?

yes/ no

VII. Building.

1) Which rooms are obligatory in the various institutions for p.p.e.?

Institutions	Rooms for						
	playing	learning	sleeping	washing	doctor	observation	staff
1 Nursery school Kindergarten	x		x	x			x
2 Day Care Centres							
3 Vorklassen							
4 Eingangsstufen							

\*partly layed down in directives, mostly dependent of the district authorities.

2a) Is there a tendency to make another decision or to add rooms?

Institutions	Addition	Other division	Reason
1 Nursery school Kindergarten	Only as wish		
2 Day Care Centres			

2b) Is there a tendency to realize this by legal regulations? yes/no

If so, what regulations and when

Hygienic and safety requirements are laid down by the inspections.

2c) Are such regulations anticipated in the planning of the institutions to be built before long?  yes/ no

3) Is a flexible use of the available room taken into consideration when institutions for p.p.e. are being built (in connection with the application of modern methods)? For instance: by means of modern building materials.

yes/ no

4) To what extent are institutions for p.p.e. being built as parts of complexes of schools?

Not/sometimes/moderately/frequently

5a) If the institutions for p.p.e. have not been incorporated in complexes of schools, are there nevertheless common facilities?  yes/ no

6) Is there in your country an information-centre for the building of schools?

yes/ no

If so, does it cover institutions for p.p.e.? no

7a) Has the building of institutions for p.p.e. been incorporated, in a number of cases, in a building-scheme for a quarter of a town (for instance in the centre of such a quarter) ?

yes/ no

If so, why?

because possibilities to play on the streets decrease and because of the fact that there is an increasing need for "Kindergärtens".

7b) Are there indications to the effect that changes will be made in the next few years?

yes /  no

What changes?

More planning of new building inclusive institutions for p.p.e.

8a) Are certain principles being applied in connection with the regional and national planning of institutions for p.p.e.?

yes /  no

8b) Do you expect changes in the near/remote future?

yes /  no

What changes:

Reason

Systematic enlargement

General demand in educational plans

VIII. Modern methods (general)

1) How would you typify education in general in your country?

	chiefly class tuition	possibilities of individualization and differentiation	individualized instruction
primary education	x		
p.p.e.			x

2) Which of the following trends influence p.p.e. in your country?

Montessori

Decroly

Fröbel

Jena Plan

psycho-analysis

Piaget's psychology

Vygotsky's psychology

3) Can an increasing influence of certain trend be found in the last few years?

yes /  no

If so, which: 

Montessori	since 2e worldwar	cause:
------------	-------------------	--------

4) Who have chiefly introduced new methods in the last few years?

private initiative /  central government /  both

Can you indicate any causes? Fröbel is no more judged as sufficient.

6a How would you typify at this moment the presentation of the subjects or the material per institution?

Institution	a.systematic	b.exemplary	c.combination of a and b	d.entirely free	e.other typification
1.Nursery school Kindergarten				x	
2 Day Care Centres					
3 Vorklassen			x		
4 Eingangsstufen					

6b Do you expect changes?

Institutions	a.sytematic	b.exemplary	c.combination of a and b	d.entirely free	e.other typification
1.Nursery school Kindergarten			x		
2.Day Care Centres					

III.B Methods (fields of development)

1) Have the institutions for p.p.e. in your country fixed time-tables?

Institutions	fixed time-tables
1 Nursery school	} no
2 Day Care Centres	
3 Vorklassen	} yes
4 Eingangsstufen	

A Preparatory language instruction

2) What is being done in preparatory language instruction?

Institutions	increase of vocabulary	syntaxis	expression	communication	aids to thinking
1 Nursery school Kindergarten	little	little	much	x	x
2 Day Care Centres					
3 Vorklassen	much	much	much	x	much
4 Eingangsstufen					

N.B. Please fill out using the categories:

much/little/moderately/nothing

3a) Is a second language being taught in one of the institutions for p.p.e.?  
If so, which second language and who is teaching?

By way of <del>experiment in single</del> <del>Kindergärten</del>	own teacher	<u>professional teacher</u>
--	-------------	-----------------------------

3b) For what reasons the young children have to learn a second language?

- 1) Because children learn in an easy way
- 2) good mutual comprehension in German-English/American "Kindergärten"

3c Do you expect introduction of a second language in p.p.c. in the future?

yes/no

**B. Preparatory teaching of arithmetic**

4) What is being done in preparatory teaching of arithmetic?

	counting	concept of quantity	theory of set modern mathematics
younger group 2-3	x	x	
middle group 3-6			
older group 5-7	x	x	x (experimental)

**C. Creative/aesthetic**

5a) In what fields aesthetics are being taught?

Fields	much / moderately / little
a Painting	x
b Music	x
c Modeling	x
d Poems	x
e Physical and play	x

5b) Are relations with other subjects being made or are relations with other subject / fields the starting-points ?

Fields	yes	hardly	no
preparatory arithmetic	x		
preparatory language	x		
function training		x	
emotionality	x		

D. Function and motor training

6) What functions do you exercise?

- 1 observation
- 2 motor action
- 3 coördination

E. Social emotional education

7) How do you evaluate the social/emotional education of the child?

now			future		
important	moderate	unimportant	important	moderate	unimportant

8) Are there relations with: Language

creativity subjects

arithmetic

experimental teaching

N.B. Please underline

F. Audio-visual Aids

9) Which audio-visual aids are being used?

	now	future		now	future
radio	not	not	tape-recorder	x	x
television	not	not	film	not	?

	now	future
language laboratory	not	not
teaching machine	not*	not

\*in single cases

IX. Experiments and research

IXA. Research

1) In what domains research 15) is being effected at the moment?

Domains	Total number of children of 2 to 7 years subjected to the research
compensation program	x
verbal stimulation	x
influencing of families	x
influencing of environment	
general cognition	x
function training	x

2) Who are researching?

	much	moderately	little
University institutions		x	
Training colleges			
Educational centres		x	
Via ministries of education, social affairs, health		x	
Private institutions			

3a) Are there mutual contacts between the researching bodies?

~~many~~ / few / ~~moderate~~

3b) Do you expect an increase of the contacts in the future? Yes

If so, reason coordination

4) With which researching bodies has the ministry in charge of p.p.e. contacts?

	many	/ moderate	/ few
University institutions			x
Training colleges			
Educational centres		x	
Other ministries			
Private institutions			

5a) Is there a tendency to shift the research to one or more particular institutions?

yes/no

If so, which institution(s)?

Deutsches Jugendinstitut in München

There is a demand for an Institute for Educational Research.

5b) Is the government planning a special institutions for research in p.p.e.?

yes / .

6a) Who chiefly finance the research in the field of p.p.e.?

government / ~~private persons~~ / government and ~~private persons~~ proportionally

6b) Is there an increase of the financing of the research by the government?

~~much~~ / moderate / ~~little~~

7) What researches are known and results, if any?

Researches	Researches	Dates
1. Research on learning to read before primary school	Brem-Gräser; Correll; Kratzmeier; Krüger;	1967-1970
	Notz; Rüdiger; Schmalohr; Schüttler-Janikula; Sennlaub	

8) What researches will be started before long?

Researches	Dates
1. Comparison of 5-6 year aged children in "Kindergärten"	1971
2. Comparison of 5-6 year aged children in "Vorklassen" (Nordrhein-Westfalen 50 classes)	1971

5) Which institutions chiefly provide for the guidance of the experiments?

University institutions

Training colleges

Educational centres

7a) Who are chiefly financing the experiments?

government / ~~private persons~~ / government and ~~private persons~~ proportionally

7b) Do you expect a change?

~~yes~~ / no

8) Is there a special scheme of subsidy for experimenting schools?

yes / no

9a) Are there legal regulations when a school participates in an experiment?

yes /  no

9b) To what extent has the experimental school been exempted from its legal obligation?

none

12) Via which media and to what extent is publicity being given to the result of research and experiments?

	much	little	moderate
mass media	x		
daily papers		x	
periodicals		x	
professional periodicals		x	

X Planning

1) What bodies now provide for the planning 17) of p.p.e. and what tasks do they especially fulfil in this planning?

Bodies	Tasks	
	chiefly quantitative planning	chiefly qualitative
1. Bund/Länder Committee		
2. Ministries of the Länder		
3. Private organization fe. churches		
4. Training Institutes		

2a) Is there a tendency to the taking over of one of both or of both kinds of planning by a national general body for p.p.e.?

yes /  no

2b) Is a legal regulation for such an operation being prepared?

yes /  no

3) Which groups plead for a better planning of p.p.e. (Please number in the order of importance)

- departmental officials
- social groups
- teachers
- educationalists
- psychologists

Italy

IC. Management is responsible for the administration of the institutions for p.p.e.?

Institutions	public bodies state / province/ municipality	private organizations association, buseness etc.
1 Scuola materna	9.95%	90.05 %

2) What percentage of the total number of children of the age group 5 to 7 is following / followed primary instruction? (primary class)

Age group	1959-1960	1966/67
up to 6 years	0.3	0.1 %
6 years	16.6	18.7 %
7 years	16.8	18.6 %

3) Are there data available about the numbers of assistants/teachers working in the varicus institutions for p.p.e.?

Institutions	Scuola Materna		
	1960/61	1965/66	1969/70
1 Directorate and teachers	31441	39.820	51499
2 Teachers		31423	45650
3 Assistents	20707	15654	17766

General information.

I A. Legal regulations

1) What institutions \* ) for p.p.e. do you know in your country? Which of them have been legally regulated?

Institutions	age group	legally regulated yes/no	which ministry	since
1 Nursery school 1)	4-7	yes	social	
2 Day Nursery	6m - 7 y	yes	social	

2) Is there a shift of the responsibility 2) for p.p.e. between ministries? No.

4) Is participation in one or more institutions obligatory? No.

5a) Are there advisory bodies with regard to the legislation for p.p.e.? The National Board of Health and Welfare since 1943.

5b) Are (other) advisory bodies 3) with regard to the legislation for p.p.e. being planned? No.

I B. Form of organization of p.p.e.

1) How have the ages, the visiting hours and the proportion between playing-, learning- and resting-times in the various institutions for p.p.e. been regulated?

Institutions	ages	visiting hours	ratio between playing/learning/ resting times	(%)
1. Nursery school	4-7	3	)	(%)
2. Day Nursery	6m-7 y	mostly open 6.30 a.m.-19 p.m.)	) No fixed plans	

2) Is there a tendency to make a change in one of the above mentioned categories? No.

3a) What is the legal admission age 4) for the primary school? 5) 7 year.

3b) Is earlier admission 6) possible? If so, how?  
Yes, on the parents wish and after a special test the child can begin at 6.

3c) How many times in a year is admission possible and on what conditions?  
Once a year in the autumn.

4a) Is readiness for school tested when the child enters the primary school? Yes.

If so, what procedure is followed?

The teaching is diagnostic for the first month. The test is involved in the ordinary teaching.

- 4b) What percentage of the total number of children of school age is tested for readiness for school?  
100%.
- 4c) Can you group the results of the tests?  
Almost all children start at 7 years of age.
- 5a) Are special measures taken for children who are not ready for school?  
The headpurpose is that the child shall be treated in its ordinary class. There are also special clinics with- in the school that train special skills with children some hours/week if necessary.
- 5b) May new measures be expexted? No.
- 6a) Is there in your country a need/desire to change the transition from forms of p.p.e. to primary education? Yes.
- 6b) May changes be expected in the regulations for the transition of forms f p.p.e. to primary education? Not for the moment.
- 7) Has p.p.e. been incorporated into a total school structure?  
No it is still not possible to obtain places for all children in some form of p.p.e.

I C. Management of the institutions.

- 1) Who is responsible for the administration of the institutions for p.p.e.?

Institutions	public bodies/state/ province/municipali- ty	private organizations association, business etc.
1) Nursery school	90%	10%
2) Day nursery		

- 2) How do you typify the administration in your country as regards the institutions for p.p.e.? Decentralization on governmental level.
- 3) To what extent does private initiative remain possible besides management on a governmental level?  
There is a possibility. It must always be supervised by the National Board though.
- 4) What share have the parents in the management <sup>7)</sup> and in the execution of the management <sup>7)</sup> in the institutions?

Institutions	management		execution	
	direct share	indirect share	direct share	indirect share
1) Nursery school		x		x
2) Day nursery		x		x

II. Statistics 8).

A. Financing. 8)

Costs  
Budget year  
1969/70

The Building Costs vary but the average is 12 000 Sw crowns per child for a Child Centre in a separate building.

The Running Costs are at present estimated at an average of 11 000 Sw crowns per child and year in a Day Nursery and 1 750 Sw crowns per child and year in a Nursery School.

Financing

Governments grants are given for the establishment of a Child Centre by 5 000 Sw crowns per child to be admitted. In addition, a loan of 4 000 Sw crowns per child can be obtained. Grants from the General Inheritance Fund, limited to 50 percent of the purchase costs, are received for furniture and other equipment.

Government subsidies are given to the running costs of Day Nurseries with 4 000 Sw crowns per child and year.

The Nursery School receives subsidy from the General Inheritance Fund for the building costs and the equipment covering, however, at the most 50 percent of the expenses. Aid for the running costs is not available.

The parents fee depends on the income of the family, its number of children and how many of them who visit the Child Centre and how many days of the week the child is at the Centre.

Because of this, the fee varies between 1 - 34 Sw crowns per child and day. On an average, the parents fee is about 7 Sw crowns a day at a Day Nursery or about 10 percent to the nursing costs, and 100-125 Sw crowns per term at the Nursery School.

4) Have you indications to the effect that full financing will be introduced within a measurable time? No.

II.B Subsidizing 9)

1) To what extent are the private institutions for p.p.e. subsidized?

Institutions	Subsidies in %
1 Nursery school	1) ) By the state the subsidies are the same as for public institutions
2 Day Nursery	)

4) Are further special subsidies granted by other ministries? No.

III. Inspection 10)

Are there medical, hygienical and pedagogical inspections for p.p.e.?

Institutions	Medical/hygienical inspections	Pedagogical inspection
1 Nursery schools	x	x
2 Day Nursery	x	x

3) Are data obtained by inspection used in the planning of the training and the in service-training 11) of teachers? No.

IV. Objectives

1) What objectives would you indicate as the most important ones per age and per institution? All are important.

2) Are there tendencies to change the priority of the objectives per institution in view of the future? No.

3a) Are there also certain objectives per institution for children from socio-economic deprived groups? No.

3b) Or have special reception facilities been created for these special groups? Yes.  
If so, what facilities? Socio-economic deprived groups have priority in obtaining places in day nurseries.

3c) Do you expect that (more) separate institutions will be established in the future for the reception of socio-economic groups? No.  
Reason: Integration is desirable.

4) Are you of opinion that a total conception of objectives is being realized by means of the various institutions for p.p.e.?  
In order to give a child the opportunity to reach the most complete development not only the efforts of the parents are necessary but the Public Authorities also must take responsibility. According to Scientific Research, 80 percent of the intellectual development of a child occurs before the child has reached its seventh year. A richly stimulating environment in the early years of the child is requested for the optimal development of each individual. Usually, the home is not sufficient in providing the complete development of the child. The Child Centre is a complement that should be established to such an extent that each child will have the opportunity to take part in some kind of activity in a Child Centre before school-age.

More and more married women with children will be working outside their homes where the labour market gives greater possibilities for education and work. From the Public point of view this is a desirable development, and as the possibilities of employing somebody for the care of the children at home nowadays are few, the Public Authorities are strongly increasing the Child Centre activities.

5b) Are there indications of a shift of influences as regards the laying down of the objectives? No.

V A. Statistical data (pupils)

1) What percentage of the total number of the ages groups 2 to 7 is following/followed a form of p.p.e.?

Age group	<u>1960</u>	<u>1965</u>	<u>1969/70</u>
2 years			4235
3-4 "			10122
5-6 "			73347

\* Around 120.000 birth/year.

V B. Statistical data (institutions).

1) Can an increase of the children-attending p.p.e. be found in the last few years? Yes.

Institutions	<u>1960</u>	<u>1965</u>	<u>1969/70</u>
1 Nursery school	ca 36000	56000	70000
2 Day Nursery	" 10000	12000	27000

2) What size have the groups per institution?

Institutions	size of the group (number of children)		
	legal	real average	desirable
1 Nursery school	20	20 + 20%	
2 Day Nursery			

3) Are there enough institutions in view of the need for p.p.e.?  
No.

If not, for what numbers of children p.p.e. is considered as desirable and how many institutions will be needed (estimates acceptable)?

From the pedagogical point of view it is desirable that children from 3 years receive p.p.e. The question has also a political side.

5) Is there a difference between attendance of institutions for p.p.e. in the town and in the country?

Day nurseries are more common in towns.

VI A Staff (general)

1) What division applies to the training of employees for the institutions for p.p.e.?

Employees	Admission Required age	Duration of the training	Ratio general education/professional study
Pre-schoolteachers	preliminary training	2 years	
Children's nurses		34 weeks	

There are no assistants.

- 2) Can you mention the principal subjects for the professional training, if possible, in the order of their importance?

Subjects:

1. Pedagogics
2. Methodology
3. Swedish
4. Creative subjects
5. Music
6. Painting and carpentry
7. Sociology

- 3) Are there data available about the numbers of assistants/teachers working in the various institutions for p.p.e.?

Institutions	Numbers of teachers		
	1960	1965	1969/70
1. Totally	1.609	2.426	5.482

- 4) Who are working as a rule per group of children in the various institutions?

Institutions	Teacher	Teacher and assistant
1. Nursery school	x	
2. Day nursery		x

- 5) Is there a tendency to change the training of employees for institutions for p.p.e.? If so, in which way.

Employees	Admission age	Required preliminary	pre-training	Duration of the training	Ratio general education/professional
1 Teacher		x	x	x	x

	Term of probation before the training	Term of probation during the training
1 Teacher		x

1 Teacher

x

- 6) Is the training of teachers for p.p.e. equal or to a high degree equal to the training of primary school teachers?  
Equal: yes.
- 7) Are measures being prepared in order to integrate the training of teachers for p.p.e. with the training of primary school teachers? Yes.  
If so, what extent and when will that possibly start? 1976.
- 8) Is it possible for men to be trained as a teacher for p.p.e?  
Yes.  
If so, is this possibility used? Normally used.  
The ratio female/male who are beginning their training to p.p.e. teachers 1971 is 1000/62.

VI B. Staff (salary)

- 1) What is the amount of the salary of employees for p.p.e. as compared with the salary of primary school teachers in: 1970.

	first year of service	
Salary of primary school teacher	2610	5 kr
Salary of teacher for p.p.e.	2315	5 kr
Salary of assistant for p.p.e.	1818	5 kr

- 2) Has in opinion the salary of teachers for p.p.e. a favourable/impeding influence on being trained for p.p.e. and on practising this profession? Impeding.

VII. Building.

- 1) Which rooms are obligatory in the various institutions for p.p.e.?

Institutions	Rooms for						
	playing	learning	sleeping	washing	doctor	observation	staff
1 Nursery school	x			x	x		x
2 Day Nursery	x		x	x	x		x

- 2a) Is there a tendency to make another division or to add rooms? The Government commission on Child Centres is working on these questions.
- 2b) Is there a tendency to realize this by legal regulations? If so, what regulations and when. See 2a.
- 3) Is a flexible use of the available room taken into consideration when institutions for p.p.e. are being built (in connection with the application of modern methods?) For instance: by means of modern building materials. Yes.
- 4) To what extent are institutions for p.p.e. being built as parts of complexes of complexes of schools? Not.
- 5a) If the institutions for p.p.e. have not been incorporated in complexes of schools, are there nevertheless common facilities? No.
- 6) Is there in your country an information-centre for the building of schools? Yes. The Board of Education. If so, does it cover institutions for p.p.e.? Yes.
- 7a) Has the building of institutions for p.p.e. been incorporated, in a number of cases, in a building-scheme for a quarter of a town (for instance in the centre of such a quarter? Yes. It is common in new areas.
- 7b) Are there indications to the effect that changes will be made in the next few years? No.

8a) Are certain principles being applied in connection with the regional and national planning of institutions for p.p.e.?  
No.

8b) Do you expect changes in the near/remote future? Yes.  
What changes: Principals for local planning for institutions for p.p.e.

VIII. Modern methods. (general)

1) How would you typify education in general in your country?

	chiefly class tuition	possibilities of individualization and differentiation	individualized instruction
primary education	yes	rather good (too many pupils	rather good
p.p.e.	no	good	good

2) Which of the following trends influence p.p.e. in your country?

- Montessori
- Fröbel
- Psycho-analysis
- Piaget's psychology
- Gesell
- Homburger-Eriksson

3) Can an increasing influence of certain trend be found in the last few years? Yes.

If so, which: Piaget  
Homburger-Eriksson

4) Who have chiefly introduced new methods in the last few years?  
private initiative/central government/ both

Can you indicate any causes?  
Government Commission

5a) To which domains of the development of children do you direct yourself(ves) in your p.p.e.?

Domains	nursery	school
1 cognition		3
2 emotional		1
3 aesthetic/creative		5
4 social		2
5 function training		4

These subjects are important only if they are integrated.  
N.B. Please number in the order of importance.

5b) Do you expect shifts in the next few years? No.

6a) How would you typify at this moment the presentation of the subjects or the material per institution?

Institution	a) systematic	b) exemplary	c) combination of a and b	d) entirely free	e) other typification
1 Nursery school			x	x	
Nursery			x	x	

6b) Do you expect changes? No.

7) How would you typify the group composition now and for the future in the institutions for p.p.e.?

Institutions	now		future	
	graded	non graded	graded	non graded
1 Nursery school	x			?
2 Day Nursery	x			x

VIII B. Methods (fields of development)

1) Have the institutions for p.p.e. in your country fixed time-tables? No.

A. Preparatory language instruction.

2) What is being done in preparatory language instruction?  
No deviation in different items.

3a) Is a second language being taught in one of the institutions for p.p.e.? No.  
If so, which second language and who is teaching? .

3b) For what reason the young children have to learn a second language? Some immigrants are taught swedish.

3c) Do you expect introduction of a second language in p.p.e. in the future? No.

B. Preparatory teaching of arithmetic.

4) What is being done in preparatory teaching of arithmetic?

	counting	concept of quantity	theory of set modern mathematics
younger group 2-3			
middle group 3-6	x	x	x
older group 5-7	x	x	x

C. Creative/aesthetic.

5a) In what fields aesthetics are being taught?  
It is involved in every days activities.

5b) Are relations with other subjects being made or are relations with other subjects/fields the starting-points?

<u>Fields</u>	yes/hardly/no
preparatory arithmetic	x
preparatory language	x
function training	x
emotionality	x

D. Function and motor training.

6) What functions do you exercise?

- 1 observation
- 2 motor action

E. Social emotional education.

7) How do you evaluate the social/emotional education of the child?

now			future		
important	moderate	unimportant	important	moderate	unimportant
x					x

8) Are there relations with: language  
creativity subjects  
arithmetic  
experimental teaching

F. Audio-visual Aids.

9) Which audio-visual aids are being used?

	now	future		now	future		now	future
radio	x	x	tape-recorder	x	x	language laboratory		
television	x	x	film	x	x	teaching machine		

IX. Experiments and research.

IX.A. Research.

1) In what domains research 15) is being effected at the moment?  
 Cooperation of primary and pre-primary schools

2) Who are researching?

much                      moderately                      little

University institutions

x

4) With which researching bodies has the ministry in charge of p.p.e. contacts?

many/                      moderate/                      few

University institutions

x

5a) Is there a tendency to shift the research to one or more particular institutions? No.

5b) Is the government planning a special institutions for research in p.p.e.? No.

6a) Who chiefly finance the research in the field of p.p.e.? Government.

6b) Is there an increase of the financing of the research by the government? Moderate.

5) Which institutions chiefly provide for the guidance of the experiments?

University institutions.

12) Via which media and to what extent is publicity being given to the result of research and experiments?

	much/ little/ moderate		
mass media			
daily papers			
periodicals	x		
professional periodicals	x		

2a) Is there a tendency to the taking over of one of both or of both kinds of planning by a national general body for p.p.e.? Yes.

2b) Is a legal regulation for such an operation being prepared? Yes.

If so, what does it contain?

Possibilities for every 6 year old to go to p.p.e.

2c) In which year will that legal regulation become operative? Not decided.

3) Which groups plead for a better planning of p.p.e. (Please number in the order of importance)

departmental officials	2
social groups	6
teachers	5
educationalists	3
psychologists	4
primary schools	7
parents	1

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Institute of Education  
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The Netherlands

European Cultural Foundation  
Pre-primary Education  
Study Project Europe 2000  
Project I, Subject III  
Study 9 D.

Dear Sir/Madam,

The European Cultural Foundation started in 1969 a series of study-projects for the future, which bear on Europe in the year 2000. Within the scope of the study-project Education I have accepted the responsibility for the study concerning pre-primary education. The objective of this study has been formulated as follows:  
"Study of ideas, methods and systems of instruction and education for children aged 2/3 to 6/7 years as they may or should develop in a future society".  
The division of the report to be published on this has been drafted as follows:

1. Object and method of the study.
2. Change of function of pre-primary education, 1800-1970.
3. Psychological aspects: changes in the view on the child.
4. Sociological aspects: changes in a view on society.
5. Educational aspects: changes in the objectives of education.
6. Economic and political aspects: changes in educational policy.
7. General data about the situation in some countries.
8. Development, trends etc. in respect to the child/family relation in the years to come.
9. Development, trends etc. in respect of the child/school/society relation in the years to come.
10. Development etc. of the institutions of pre-primary education.
11. Development etc. of the economic and political possibilities: in a given case-possibilities of policy.
12. Experiments, research etc. (language-compensation, authority).
13. Consequences for the 21st century.
14. Provisions, planning.

In the objective reference is made to ideas, methods and systems that may or should develop.

On the one hand more or less autonomous developments are therefore concerned that may present themselves in the next 30 years (trends), on the other hand situations, developments and plans are concerned that, in your opinion, should be consciously begun by the government or other managing bodies (visions).

You will find a minimum of questions formulated for each professional field. Ideas and suggestions that exceed the answering of the questions but clearly relate to pre-primary education will be very welcome to me.

This questionnaire is primarily directed to you as specialist, however if possible you can also answer the other questions. It will be of interest to me that you briefly state your arguments for any of your points of view.

If you can mention particulars of publications persons or organizations that may give me valuable information or advices regarding pre-primary education, I shall be most grateful to you.

Thanking you in advance for your kind co-operation, I am,

. Yours very truly,

Prof.Dr.L.v.Gelder.

- a) The questions always concern children aged 2/3 to 6/7 years.
- b) The questions about trends and visions always cover the period from 1970 to 2000.
- c) As answering-categories you may use the points in the drafting of the report (on pages, 1,2) but this is not essential.
- d) We shall appreciate your stating on page 27 of important and/or special literature and also experiments, if any, that support your opinion.
- e) Will you mention on page 28 respondents (also from (the) other (mentioned) professional fields) who are, in your opinion, of interest for this study?

## PSYCHOLOGY

1. Which moments are, in your opinion, most important in the psychological development of the child and what conditions are essential for obtaining a good psychic development of the young child?

Moments:

Conditions:

2. What will and should be the function of pre-primary education in connection with a good psychic development of the young child?  
(trends and visions)

Trends:

Visions:

3. What psychological conditions will and should pre-primary education comply with so that it may function also in the future?

Trends:

Visions:

4. What place will, in your opinion, family education and the forms of established education (crèches, day nurseries etc.) take in the future?

Family education:

Established education:

5. To what extent do you think it justified that the part of the mother is acted by persons other than the mother herself? (for instance in day nurseries etc.?)
6. What provisions for a good psychological development of the young child will be especially necessary for the child in the family in an urbanized environment (living in blocks of flats, advices to parents, playing facilities)?

SOCIOLOGY.

1. Which data, ideas and theories of sociology are of special interest to the education of the young child?
2. What function will and should pre-primary education (crèche, preparatory school etc.) have from the sociological point of view with regard to the education of the child? (trends and visions)

Trends:

Visions:

3. What sociological conditions will and should be complied with by that pre-primary education in order that it may function?

Trends:

Visions:

4. To what extent citifying can a further technological development and the ensuing urbanization and citifying of the country influence the educational pattern of the young child?
5. May data be deduced from family sociology that indicate a further change of function of the family and to what extent is the educational function of the family menaced by that change?

Data change of function:

Menace educational function:

6. What forms of society should be promoted in the future so that the socialization of the young child in its family and in its close environment may take place favourably? (community, development, communes, larger living communities)

PEDAGOGY

1.
  - 1a) Can general objectives in education of young children be formulated? If so, what are those objectives?
  - 1b) Is there a tendency or are you inclined to reason by starting from society for your educational objectives so that you are speaking about "adapted man" or about "man adapting himself"?

Tendency or inclination:

- 1 c-1. Is there a tendency or are you inclined to reason by starting from the "essence" of man for your educational objectives. (Please specify what you understand by "essence")

Tendency or inclination:

- 1 c-2. What form of society will be in your opinion an optimum guarantee for that "essence"?

- 1 d) How do you possibly view the relation between the questions on page 17 and page 18?

2. What influences will the changing society with a changing prosperity pattern (working women) exercise on the education of the young child in families and institutions?

Families:

Institutions:

3. Is there an economic model indicating the effect of education on the national income? Is so, how large can or should the share of education be in a national budget?
4.
  - 4a) Which expenditures should have priority in a certain budget for education?
  - 4b) To what extent does this apply especially to provisions for the youth period?
5. What influences should education and instruction of the young child exercise on society?
6.
  - 6a) What conditions should be complied with so that children may enjoy an optimum development.
    - 1 - in respect of the family?
    - 2 - in respect of other bodies?
    - 3 - in respect of society?
  - 6b) How may or will especially pre-primary education be realized? (Please give an elaboration of the organizing and didactic composition).

Trends:

Visions:

7. To what extent have you as an educationalist to take into consideration data from psychology, economy etc. in connection with the changing educational procedures, especially with regard to pre-primary education? (Can you give examples).
- 7.2. Can you describe the manner in which you are working these data into an educational context?

-----



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26-4-1971

European Cultural Foundation  
Pre-primary Education  
Study Project Europe 2000  
Project I, Subject III  
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12. Experiments, research etc. (language-compensation, authority).
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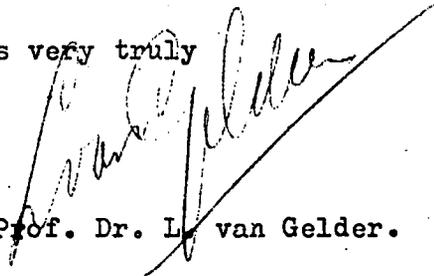
In the project there is a need for such statistical data of your country as formulated at the next pages.

I shall be most grateful to you, if you will fill in those data that are known to you.

If you cannot provide me with data, I shall appreciate your returning me the questionnaire, if possible with a list of addresses where the desired information might be obtained.

Thanking you in advance for your kind co-operation I am.

Yours very truly



Prof. Dr. L. van Gelder.

## Inquiry

N.B. In the list of terms you may find a short definition of all numbered expressions in the inquiry.

We mention as examples some institutions in the field of pre-primary education (p.p.e.= "education preceding the first level, which provides education for children who are not old enough to enter a school at the first level".

(Definition: "Recommendation concerning the International Standardization of Educational Statistics", Paris, 1958)

It was impossible to find common terms for all forms of p.p.e. in the various countries (We mention as examples some institutions: day-nursery, infant play-room, nursery school, crèche, kinderladen, kindergarten.)

Please give on page 31 a short definition of the institutions mentioned by you. Kindly use them always in the same order in the questionnaire. Thank you very much!

### List of terms

- 1) Nursery school: Kindergarten, infant school, infant class
- 2) Responsibility: ministerial responsibility = responsibility for legal regulations
- 3) Advisory bodies: bodies that have as task to give information in the field of pre-primary education
- 4) Admission age: year and month in which the child is legally obliged to start following primary instruction.
- 5) Primary school: school at the first level; main function to provide basic instruction in the tools of learning (Definition: Unesco Recommendation, 1958, Paris)
- 6) Earlier admission: exceptions to 4) after readiness for school has been proved.
- 7) Management: planning and execution
- 8) Financing: the government providing funds for "public institutions" (public school = school operated by a public authority - Definition:
- 9) Subsidizing: the government providing funds for "private institutions". (private school = school not operated by a public authority - Definition: Unesco Recommendation, 1958, Paris).
- 10) Inspection: inspection, by the government, of the observance of the legal regulations to which the institutions have been subjected (for instance: educational, medical/hygienic)
- 11) In-service training: training of qualified teachers who are already working in practice.
- 12) Group size: the national average number of children per teacher.
- 13) Teachers: qualified teachers
- 14) Assistants: all those working under a qualified teacher
- 15) Research: research in a special field
- 16) Experiments: applications for a fixed period on the basis of results of research
- 17) Planning: systematic innovation in education.

General information.

I A. Legal regulations

1) What institutions \*) for p.p.e. do you know in your country ? Which of them have been legally regulated ?

Institutions	age group	legally regulated yes / no	which ministry	since
1 Nursery school Kindergarten 1)				
2 . . . . .				
3 . . . . .				
4 . . . . .				
5 . . . . .				

2) Is there a shift of the responsibility 2) for p.p.e. between ministries ?

Institutions	first under the ministry of	to the ministry of	as from
1 Nursery school Kindergarten 1)			
2 . . . . .			
3 . . . . .			
4 . . . . .			
5 . . . . .			

3) Is there a tendency to start regulating also the institutions without legal regulation and if so, in which year do you expect it to occur ?

Institutions	Legal regulation as from	reason	under the ministry of
1 Nursery school Kindergarten 1)			
2 . . . . .			
3 . . . . .			
4 . . . . .			
5 . . . . .			

O.I./71/640.

4) Is participation in one or more institutions obligatory ?

Institutions	obligatory	not obligatory	since	reason
1 Nursery school Kindergarten 1)				
2 . . . . .				
3 . . . . .				
4 . . . . .				
5 . . . . .				

5a) Are there advisory bodies with regard to the legislation for p.p.e. ?

What bodies	advising since
1 . . . . .	
2 . . . . .	

5b) Are (other) advisory bodies 3) with regard to the legislation for p.p.e. being planned ?

Bodies	reason
1 . . . . .	
2 . . . . .	

IB. Form of organization of p.p.e.

1) How have the ages, the visiting hours and the proportion between playing-, learning- and resting-times in the various institutions for p.p.e. been regulated ?

Institutions	ages	visiting hours	ratio between playing/learning/ resting times
1 Nursery school 1) Kindergarten			(%)
2 . . . . .			
3 . . . . .			
4 . . . . .			
5 . . . . .			

2) Is there a tendency to make a change in one of the above mentioned categories ?

ages	reason
visiting hours	reason
ratio between times for play/learning/rest	reason

3a) What is the legal admission age 4) for the primary school ? 5)

3b) Is earlier admission 6) possible ? If so, how ?

3c) How many times in a year is admission possible and on what conditions ?

4a) Is readiness for school tested when the child enters the primary school, before the child enters the primary school ?

yes / no

If so, what procedure is followed ?

4b) What percentage of the total number of children of school age is tested for readiness for school ?

4c) Can you group the results of the tests ?

ready for the primary school	not ready for school
5 years %	5 years %
6 " (number)	6 " (number)
7 " (number)	7 " (number)

5a) Are special measures taken for children who are not ready for school ?

What measures ?	Since
1	
2	
3	

5b) May new measures be expected ?  yes /  no

If so, what measures ? \_\_\_\_\_

6a) Is there in your country a need / desire to change the transition from forms of p.p.e. to primary education ?  yes /  no

If so, what are the reasons for changes, if any ? \_\_\_\_\_

6b) May changes be expected in the regulations for the transition of forms of p.p.e. to primary education ?  yes /  no

If so, what changes ? \_\_\_\_\_

7) Has p.p.e. been incorporated into a total school structure ?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IC. Management of the institutions.

1) Who is responsible for the administration of the institutions for p.p.e. ?

Institutions	public bodies state / province / municipality	private organizations association, business etc.
1 Nursery school Kindergarten 1)	%	%
2 . . . . .		
3 . . . . .		
4 . . . . .		
5 . . . . .		

(N.b. Total per institution 100%)

2) How do you typify the administration in your country as regards the institutions for p.p.e. ?

Types of management	Now	In the future
1 centralization on governmental level		
2 decentralization on governmental level		
3 centralization on private level		
4 decentralization on private level		

Comments, if any.

3) To what extent does private initiative remain possible besides management on a governmental level ?

4) What share have the parents in the management<sup>7)</sup> and in the execution of the management 7) in the institutions ?

Institutions	management		execution	
	direct share	indirect share	direct share	indirect share
1 Nursery school Kindergarten 1)				
2 . . . . .				
3 . . . . .				
4 . . . . .				
5 . . . . .				

O.I./71/644

II. Statistics 8).

A. Financing 8)

1) How is the budget for p.p.e. in your country divided into the following items ?

	1960	1965	1969/70
staff			
housing / accomodation			
school materials			
social provisions			

2) May important changes be expected in the above division ? If so, what changes ? \_\_\_\_\_  
\_\_\_\_\_

3) Is public p.p.e. fully financed ?

yes /  no

If not, what contribution is claimed from others ?

parents		% or sum of money
other bodies		% or sum of money
		% or sum of money

4) Have you indications to the effect that full financing will be introduced within a measurable time ?  
\_\_\_\_\_  
\_\_\_\_\_

IIB. Subsidizing 9)

1) To what extent are the private institutions for p.p.e. subsidized ?

Institutions	Subsidies in %
1 Nursery school Kindergarten 1)	
2 . . . . .	
3 . . . . .	
4 . . . . .	
5 . . . . .	

2) What subsidy standards apply to the private institutions for p.p.e. as regards:

	possible percentages
buildings	%
maintenance of buildings	%
staff	%
school materials	%
social provisions	%

3) Are there indications to the effect that subsidy schemes impede or promote participation of children in p.p.e. ?

Impeding due to: \_\_\_\_\_

Promoting due to: \_\_\_\_\_

4) Are further special subsidies granted by other ministries ?

Institutions	Ministry of	Special subsidy for
1 Nursery schools Kindergarten 1)		
2 . . . . .		
3 . . . . .		
4 . . . . .		
5 . . . . .		

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III. Inspection 10)

1) Are there medical, hygienical and pedagogical inspections for p.p.e. ?

Institutions	Medical/hygienical inspections	Pedagogical inspection
1 Nursery schools 1) Kindergarten		
2 . . . . .		
3 . . . . .		
4 . . . . .		
5 . . . . .		

2) Is pedagogical inspection more emphasized in your country or is it going to be so ?

	Medical/hygienical inspection	Pedagogical inspection
Emphasis is now on		
Emphasis will be on		

3) Are data obtained by inspection used in the planning of the training and the in service-training 11) of teachers ?

yes / no

If so, how ? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IV. Objectives

1) What objectives would you indicate as the most important ones per age and per institution ?

Institution/ ages	medical/ hygienic	cognition	social/ emotional	other
1 nursery school .. years .. years				
2 . . . . . .. years .. years				
3 . . . . . .. years .. years				
4 . . . . . .. years .. years				
5 . . . . . .. years .. years				

2) Are there tendencies to change the priority of the objectives per institution in view of the future.

Institution	medical/ hygienic	cognition	social/ emotional	other
1 Nursery school Kindergarten 1)				
2 . . . . .				
3 . . . . .				
4 . . . . .				
5 . . . . .				

3a) Are there also certain objectives per institution for children from socio-economic deprived groups ?

Institutions	specific objectives (for instance: influencing of families, improvement of the transition possibilities in respect of primary education in underprivileged environmental groups etc.)
1 Nursery school Kindergarten	
2 . . . . .	
3 . . . . .	
4 . . . . .	
5 . . . . .	

3b) Or have special reception facilities been created for these special groups ?

yes / no

If so, what facilities?

Special reception facilities	Reason
1	
2	
3	
4	

3c) Do you expect that (more) separate institutions will be established in the future for the reception of socio-economic groups ?

If so, reason \_\_\_\_\_

If not, reason \_\_\_\_\_

4) Are you of opinion that a total conception of objectives is being realized by means of the various institutions for p.p.e. ?

\_\_\_\_\_  
 \_\_\_\_\_

5a) Who now have the greatest influence per institution as regards the laying-down of the objectives (please number in the order of importance)

Institutions	child-psychologists/ educationalists	society	the primary school with its requirements
1 Nursery school Kindergarten 1)			
2 . . . . .			
3 . . . . .			
4 . . . . .			
5 . . . . .			

5b) Are there indications of a shift of influences as regards the laying-down of the objectives ?

Institutions	from	to
1 Nursery school Kindergarten		
2 . . . . .		
3 . . . . .		
4 . . . . .		
5 . . . . .		

VA. Statistical data (pupils)

1) What percentage of the total number of the ages groups 2 to 7 is following / followed a form of p.p.e. ?

Age group	1960	1965	1969/70
2 years			%
3 "			%
4 "			%
5 "			%
6 "			%
7 "			%

2) What percentage of the total number of children of the age groups 5 to 7 is following / followed primary instruction ?

Age group	1960	1965	1969/70
5 years			%
6 "			%
7 "			%

3) Is / has the influence of p.p.e. being / been examined in connection with the results of primary instruction ?

yes /  no

If so, can you mention the results of the investigation ?

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4) Does the admission age of children for the primary school in your country play a part in connection with staying down ?

yes /  no

If so, what is the result of the investigation on which the answer is based ?

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VB. Statistical data (institutions).

1) Can an increase of the number of institutions for p.p.e. be found in the last few years ?

Please confirm by means of figures.

Institutions	1960	1965	1969/70
1 Nursery school 1) Kindergarten			%
2 . . . . .			%
3 . . . . .			%
4 . . . . .			%
5 . . . . .			%

2) What size 12) have the groups per institution ?

Institutions	size of the group (number of children)		
	legal	real average	desirable
1 Nursery school 1) Kindergarten			
2 . . . . .			
3 . . . . .			
4 . . . . .			
5 . . . . .			

3) Are there enough institutions in view of the need for p.p.e. ?

yes / no

If not, for what numbers of children p.p.e. is considered as desirable and how many institutions will be needed (estimates acceptable) ?

Institutions	Number of children	Number of institutions
1 Nursery school 1) Kindergarten		
2 . . . . .		
3 . . . . .		
4 . . . . .		
5 . . . . .		

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4) Can the numbers of new institutions be stated, which have been planned in connection with the above mentioned shortages ?

Institutions	Numbers
1 Nursery school 1) Kindergarten	
2 . . . . .	
3 . . . . .	
4 . . . . .	
5 . . . . .	

5) Is there a difference between attendance of institutions for p.p.e. in the town and in the country ?

	<u>Percentage of 2 to 7 years old children receiving p.p.e.</u>		
	1960	1965	1969/70
Town			
Country			

VIA. Staff (general)

1) What division applies to the training of employees for the institutions for p.p.e. ?

Employees	Admission age	Required preliminary training	Duration of the training	Ratio general education/professional study
1 Teachers 13)				
2 Assistants 14)				

	Term of probation before the training	Term of probation during the training
1 Teachers		
2 Assistants		

2) Can you mention the principal subjects for the professional training, if possible, in the order of their importance ?

Subjects	Teachers	Assistants
1		
2		
3		
4		
5		
6		
7		

3) Are there data available about the numbers of assistants / teachers working in the various institutions for p.p.e. ?

Institutions	Numbers of teachers			Numbers of assistants		
	1960	1965	1969/70	1960	1965	1969/70
1 Nursery school Kindergarten						
2 . . . . .						
3 . . . . .						
4 . . . . .						
5 . . . . .						

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4) Who are working as a rule per group of children in the various institutions ?

Institutions	Teacher	Assistant	Teacher and assistant	Otherwise
1 Nursery school Kindergarten				
2 . . . . .				
3 . . . . .				
4 . . . . .				
5 . . . . .				

5) Is there a tendency to change the training of employees for institutions for p.p.e. ? If so, in which way.

Employees	Admission age	Required preliminary	pre-training	Duration of the training	Ratio general education/professional study
1 Teacher					
2 Assistant					

	Term of probation before the training	Term of probation during the training
1 Teacher		
2 Assistant		

6) Is the training of teachers for p.p.e. equal or to a high degree equal to the training of primary school teachers ?

Equal:  To a high degree equal:

7) Are measures being prepared in order to integrate the training of teachers for p.p.e. with the training of primary school teachers ?

If so, what extent and when will that possibly start ?

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8) Is it possible for men to be trained as a teacher for p.p.e. ?

If so, is this possibility used ?

If not, is it going to be possible in the future.

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VIB. Staff (salary)

- 1) What is the amount of the salary of employees for p.p.e. as compared with the salary of primary school teachers in:

	first year of service	maximum number of years of service
Salary of primary school teacher	100%	100%
Salary of teacher for p.p.e.		
Salary of assistant for p.p.e.		

- 2) Has in opinion the salary of teachers for p.p.e. a favourable / impeding influence on being trained for p.p.e. and on practising this profession ?

Impeding	Favourable
----------	------------

- 3) Is there a tendency to level the salaries (if they are differing) ?

yes / no
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VII. Building.

1) Which rooms are obligatory in the various institutions for p.p.e. ?

Institutions	Rooms for						
	playing	learning	sleeping	washing	doctor	observation	staff
1 Nursery school Kindergarten							
2 . . . . .							
3 . . . . .							
4 . . . . .							
5 . . . . .							

2a) Is there a tendency to make another division or to add rooms ?

Institutions	Addition	Other division	Reason
1 Nursery school Kindergarten			
2 . . . . .			
3 . . . . .			
4 . . . . .			
5 . . . . .			

2b) Is there a tendency to realize this by legal regulations ?    yes / no  
If so, what regulations and when

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2c) Are such regulations anticipated in the planning of the institutions to be built before long ?

yes / no
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3) Is a flexible use of the available room taken into consideration when institutions for p.p.e. are being built (in connection with the application of modern methods) ? For instance: by means of modern building materials.

yes / no
----------

4) To what extent are institutions for p.p.e. being built as parts of complexes of schools ?

Not / sometimes / moderately / frequently
---

5a) If the institutions for p.p.e. have not been incorporated in complexes of schools, are there nevertheless common facilities ?  yes /  no

If so, what facilities ?  
\_\_\_\_\_  
\_\_\_\_\_

5b) Are there facilities which in your opinion can / should be made jointly ?  yes /  no

If so, what facilities ?  
\_\_\_\_\_  
\_\_\_\_\_

6) Is there in your country an information-centre for the building of schools ?  yes /  no

If so, does it cover institutions for p.p.e. ?  
\_\_\_\_\_  
\_\_\_\_\_

7a) Has the building of institutions for p.p.e. been incorporated, in a number of cases, in a building-scheme for a quarter of a town (for instance in the centre of such a quarter) ?  yes /  no

If so, why ?  
\_\_\_\_\_  
\_\_\_\_\_

7b) Are there indications to the effect that changes will be made in the next few years ?  yes /  no

What changes ?  
\_\_\_\_\_  
\_\_\_\_\_

8a) Are certain principles being applied in connection with the regional and national planning of institutions for p.p.e. ?  yes /  no

What principles ?  
\_\_\_\_\_  
\_\_\_\_\_

8b) Do you expect changes in the near / remote future ?  yes /  no

What changes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Reason: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

VIII. Modern methods.(general)

1) How would you typify education in general in your country ?

	chiefly class tuition	possibilities of individualization and differentiation	individualized instruction
primary education			
p.p.e.			

2) Which of the following trends influence p.p.e. in your country ?

- Montessori
- Decroly
- Fröbel
- Jena Plan
- psycho-analysis
- Piaget's psychology
- Vygotsky's psychology
- .....
- .....

N.B. Please underline the trends

3) Can an increasing influence of certain trend be found in the last few years ?

yes / no

If so, which:

since:	cause:

4) Who have chiefly introduced new methods in the last few years ?

private initiative / central government / both

Can you indicate any causes ?

---

5a) To which domains of the development of children do you direct yourself(ves) in your p.p.e. ?

Domains	nursery school.	.....	.....
1 cognition			
2 emotional			
3 aesthetic/creative			
4 social			
5 function training			

N.B. Please number in the order of importance.

5b) Do you expect shifts in the next few years ?

Domains	nursery school . . . . .		
1 cognition			
2 emotional			
3 aesthetic/creative			
4 social			
5 function training			

N.B. Please number in the order of importance.

5c) Will these shifts be regulated legally ?

6a) How would you typify at this moment the presentation of the subjects or the material per institution ?

Institution	a) systematic	b) exemplary	c) combination of a and b	d) entirely free	e) other typification
1 Nursery school Kindergarten					
2 . . . . .					
3 . . . . .					
4 . . . . .					
5 . . . . .					

6b) Do you expect changes ?

Institutions	a) systematic	b) exemplary	c) combination of a and b	d) entirely free	e) other typification
1 Nursery school Kindergarten					
2 . . . . .					
3 . . . . .					
4 . . . . .					
5 . . . . .					

7) How would you typify the group composition now and for the future in the institutions for p.p.e. ?

Institutions	now		future	
	graded	non graded	graded	non graded
1 Nursery school Kindergarten				
2 . . . . .				
3 . . . . .				
4 . . . . .				

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VIII B. Methods (fields of development)

1) Have the institutions for p.p.e. in your country fixed time-tables ?

Institutions	fixed time-tables
1 Nursery school	
2 . . . . .	
3 . . . . .	
4 . . . . .	
5 . . . . .	

A. Preparatory language instruction.

2) What is being done in preparatory language instruction ?

Institutions	increase of vocabulary	syntaxis	expression	communication	aids to thinking
1 Nursery school Kindergarten					
2 . . . . .					
3 . . . . .					
4 . . . . .					
5 . . . . .					

N.B. Please fill out using the categories:

much/little/moderately/nothing

3a) Is a second language being taught in one of the institutions for p.p.e. ?  
If so, which second language and who is teaching ?

. . . . .	own teacher	professional teacher
-----------	-------------	----------------------

3b) For what reasons the young children have to learn a second language ?

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3c) Do you expect introduction of a second language in p.p.e. in the future ?

yes / no
----------

If so, which language:..... when:.....

**B. Preparatory teaching of arithmetic.**

4) What is being done in preparatory teaching of arithmetic ?

	counting	concept of quantity	theory of set modern mathematics
younger group 2-3			
middle group 3-6			
older group 5-7			

**C. Creative /aesthetic.**

5a) In what fields aesthetics are being taught ?

Fields	much / moderately / little
a.....	
b.....	
c.....	
d.....	
e.....	

5b) Are relations with other subjects being made or are relations with other subjects / fields the starting-points ?

Fields	yes / hardly / no		
preparatory arithmetic			
preparatory language			
function training			
emotionality			
.....			
.....			

**D. Function and motor training.**

6) What functions do you exercise ?

- 1 observation
- 2 motor action
- 3 . . . . .
- 4 . . . . .
- 5 . . . . .
- 6 . . . . .

E. Social emotional education.

7) How do you evaluate the social/emotional education of the child ?

now			future		
important	moderate	unimportant	important	moderate	unimportant

8) Are there relations with: language  
 creativity subjects  
 arithmetic  
 experimental teaching  
 . . . . .  
 . . . . .

N.B. Please underline

F. Audio-visual Aids.

9) Which audio-visual aids are being used ?

	now	future		now	future		now	future
radio			tape-recorder			language laborato- ry		
television			film			teaching machine		

IX. Experiments and research.

IXA. Research.

1) In what domains research 15) is being effected at the moment ?

Domains	Total number of children of 2 to 7 years subjected to the research
compensation program	
verbal stimulation	
influencing of families	
influencing of environment	
general cognition	
function training	
.....	
.....	

2) Who are researching ?

	much	moderately	little
University institutions			
Training colleges			
Educational centres			
Via ministries of education, social affairs, health			
Private institutions			

3a) Are there mutual contacts between the researching bodies ?  
many / few / moderate.

3b) Do you expect an increase of the contacts in the future ?

If so, reason .....

If not, reason .....

4) With which researching bodies has the ministry in charge of p.p.e. contacts ?

	many	moderate	few
University institutions			
Training colleges			
Educational centres			
Other ministries			
Private institutions			

5a) Is there a tendency to shift the research to one or more particular institutions ?

yes /  no

If so, which institution(s)?

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5b) Is the government planning a special institutions for research in p.p.e. ?

Reason:

yes /  no

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6a) Who chiefly finance the research in the field of p.p.e. ?

government / private persons / government and private persons proportionally

6b) Is there an increase of the financing of the research by the government ?

much / moderate / little

7) What researches are known to the Ministry and results, if any ?

Researches	Results	Dates
1.		
2.		
3.		
4.		
5.		

8) What researches will be started before long ?

Researches	Objectives	Dates
1.		
2.		
3.		
4.		
5.		

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IXB. Experiments 16).

1) In which domains experiments are being made with the results of research ?

Domains	Total participation of the number of children of 2 to 7 years
Compensation programs	
verbal stimulation	
influencing of families	
influencing of environment	
general stimulation of cognition	
function training	
community schools	
anti-authoritative education	

2a) What experiments do you chiefly see in a certain age group ?  
(see above mentioned categories)

age groups	experiments
2 - 3 years	
3 - 5 "	
5 - 7 "	

2b) What kinds of experiments will be emphasized according to you in the various age groups in the next few years ?

age groups	experiments
2 - 3 years	
3 - 5 "	
5 - 7 "	

3) On what scale work is being done as an average per experiment ?

Scales	Kinds of experiments (see categories)
1 to 2 schools	
3 to 10 schools	
10 to 100 schools	

4) What is the average duration of the experiments ?

Time	Kinds of experiments
.....	
.....	
.....	

5) Which institutions chiefly provide for the guidance of the experiments ?

- University institutions
- Training colleges
- Educational centres
- Guidance via ministry dealing with p.p.e.
- Private institutions

6) How will guidance of experiments be provided for in the future ?

\_\_\_\_\_

\_\_\_\_\_

7a) Who are chiefly financing the experiments ?

government / private persons / government and private persons proportionally

7b) Do you expect a change ?

yes /  no

If so, for what reason ? \_\_\_\_\_

\_\_\_\_\_

8) Is there a special scheme of subsidy for experimenting schools ?

yes /  no

If so, what does it contain ? \_\_\_\_\_

\_\_\_\_\_

9a) Are there legal regulations when a school participates in an experiment ?

yes /  no

If so, what regulations ? \_\_\_\_\_

\_\_\_\_\_

9b) To what extent has the experimental school been exempted from its legal obligation?

\_\_\_\_\_

\_\_\_\_\_

10) What experiments are now known to the ministry and results, if any ?

Experiments	Results	Dates
1.		
2.		
3.		
4.		
5.		

11) What experiments will be started before long ? (Please, give a short description)

1. ....
2. ....
3. ....
4. ....
5. ....

12) Via which media and to what extent is publicity being given to the result of research and experiments ?

	much	/	little	/	moderate
mass media					
daily papers					
periodicals					
professional periodicals					
.....					

X. Planning.

1) What bodies now provide for the planning (17) of p.p.e. and what tasks do they especially fulfil in this planning ?

Bodies	Tasks	
	chiefly quantitative planning	chiefly qualitative
1.		
2.		
3.		
4.		

2a) Is there a tendency to the taking over of one of both or of both kinds of planning by a national general body for p.p.e. ?

yes / no

If so, what body ?

chiefly qualitative/chiefly quantitative/qualitative and quantitative

2b) Is a legal regulation for such an operation being prepared ?

yes / no

If so, what does it contain ?

\_\_\_\_\_

2c) In which year will that legal regulation become operative ?

\_\_\_\_\_

3) Which groups plead for a better planning of p.p.e. (Please number in the order of importance)

- departmental officials
- social groups
- teachers
- educationalists
- psychologists
- primary schools
- .....
- .....

List of respondents

Questionnaire II

England

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University of London

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Statistisches Bundesamt - Wiesbaden

Italy

Instituto Centrale di Statistica-  
Rome

Sweden

Chr.Gars

The National Board of Health and  
Welfare - Stockholm

-----

Reading listQuestionnaire II

- Blackstone T. A fair start London 1971
- Blackstone T. Pre-school Education in Europe Strasbourg 1970
- Braun M.  
Süszmuth R. Modelle der Kooperation von  
Elementarbereich im internatio-  
nalen Gutachten für die Bildungs-  
kommission des Deutsches Bildung-  
rates 1971.
- Chauncey H. Soviet pre-school education II New-York 1969
- Eyken W.v.d. The Preschool Years Penquin 1967
- Howe E Under five: a report on nursery  
education London 1966
- Schultze W (ed) Schulen in Europa Weinheim 1968
- Schüttler-Janikulla K. Einschulungs alter und Vorklassen-  
betreuung München 1968
- Sourgen H. Les écoles maternelles Paris 1969
- Leandri Fr.
- Trouillet B. Die Vorschulerziehung in neun  
europäischen Ländern.
- Yudkin S. 0-5: A report on the care of  
preschool children London 1968
- Preschool Education Unesco Paris 1963
- Statistical Yearbooks Unesco Paris
- Tableaux de l'éducation  
nationale  
Ministère de l'éducation  
nationale Paris 1969.

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ABSTRACT

This experiment involves an attempt to develop a paradigm for measuring nonverbal expressiveness in young children, measured in terms of "sending ability" (an individual's ability to send accurate and appropriate nonverbal messages to others). Nursery school children viewed a series of 16 slides described as familiar, unfamiliar, unpleasant, or unusual. The child's mother watched his expression and tried to guess which slide the child was viewing. The child also rated each slide according to how it made him feel. Results indicated no sex differences in communication accuracy, which is contrary to findings in previous studies with adults. It was also possible to measure nonverbal communication in young children. A second study was designed to replicate the first and to relate individual differences in expressiveness to other measures of emotional expression. Results confirmed the first study, and also indicated that nonverbal expressiveness was related to other kinds of emotional behavior. (ST)

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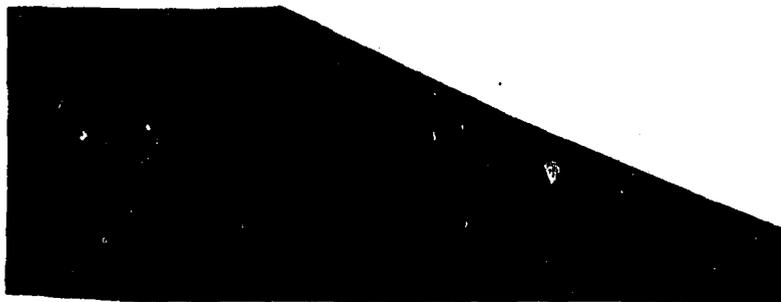
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Nonverbal communication of  
affect in children

Ross Buck  
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Report # 73-8

Portions of this paper were presented at the meeting of the  
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This experiment involves an attempt to develop a paradigm for measuring nonverbal expressiveness in young children. There is evidence that nonverbal behavior may be a particularly important factor in the development of emotional expression and social behavior. Nonverbal behaviors accompany emotional states in many species of animals, and they often appear to play a role in the regulation of social behavior by aiding the process of communication between individuals (cf. Vine, 1969). Abnormalities in nonverbal behavior may disrupt normal social behavior. For example, the aberrant social behavior of deprived rhesus monkeys may be related to their inability to accurately "send" and "receive" the nonverbal messages appropriate to their species (Miller, Caul, and Mirsky, 1967). Among humans, nonverbal behaviors thought to signal "intimacy" have been shown to have considerable intra-individual stability over time, and have been related to low social anxiety (Patterson, 1973).

Measurement is a major problem in the study of nonverbal expression. Nonverbal behavior occurs in a complex flow, and the meaning of a particular response is often dependent upon the behaviors preceeding and following it, as well as the situational context. It is impossible to obtain an absolute measure of expressiveness: any measure is necessarily a function of the particular measuring system, and there are many approaches that one might take in developing a measuring system.

The present paradigm measured nonverbal expressiveness in terms of "sending ability": an individual's ability to send accurate and

appropriate nonverbal messages to others.<sup>2</sup> It was developed from studies in which an adult "sender" viewed and described his subjective reaction to a series of emotionally-loaded color slides (Buck, Savin, Miller and Caul, 1972; Buck, Miller, and Caul, 1973). There were five distinct kinds of slides: sexual, scenic, pleasant people, unpleasant, and unusual. Unknown to the sender, an observer watched via a hidden television camera the facial expressions and gestures the sender made while reacting to the slides. For each slide, the observer attempted to judge what kind of slide the sender had watched and how pleasant or unpleasant the sender's emotional reaction was. These judgments were compared to the actual slide seen by the sender and the sender's own rating of his emotional reaction.

Results indicated that statistically significant nonverbal communication occurred: the observers could correctly judge what kind of slide was shown more often than chance, and there were significant positive relationships between the sender's and observer's ratings of the sender's emotional responses to the slides. There were also large individual differences between senders in the amount of accurate communication. Women were consistently better senders than men, and accurate senders gave a more personal verbal report of their subjective response to the slides (See Buck et. al., 1973). Also, more accurate senders had smaller skin conductance and heart rate responses to the slides than did less accurate senders. Following Jones (1960), accurate senders with small physiological responses were termed "externalizers," while individuals showing

the opposite pattern of response were labeled "internalizers." Externalizers scored higher in extraversion and self esteem than did internalizers, and females tended to be externalizers and males internalizers.

The study of the development of nonverbal expression in children may do much to illuminate the meaning of these findings. It may be for example that the sex difference observed in adults is in part a result of socialization pressures that bear down more heavily on boys than on girls in our culture. Several investigators have suggested that nonverbal expression may become inhibited in the process of socialization (e.g. Izard, 1971), and both Jones (1960) and Lanzetta and Kleck (1970) have theorized that such inhibition is in some way associated with increased physiological responding. It may be that young boys are more likely to come to use an internalizing mode of emotional expression because they are generally discouraged more than girls from overtly expressing many emotions.

If this is true, it is possible that young children will not show the sex difference in nonverbal expression and physiological responding found in adults. Furthermore, it may be possible to study the development and determinants of this sex difference in progressively older samples of children. This experiment was designed as a first step in this direction.

#### Method--Experiment I

##### Subjects.

Ten males and five females comprising a class from the university nursery school served as senders. Their ages ranged

from 4 to 6; mean age was 67 mo. Two other children in the class were not run because of scheduling problems. The child's mother was the primary observer. In addition, videotapes of the child were judged by five male and five female undergraduate observers.

#### Procedure.

A series of 16 slides were created comprising four slides in each of four content categories. The first category was "Familiar People," showing the child himself and his friends at the nursery school. Each child was photographed in the school a month before the experiment. During the experiment, the child saw two slides of himself and two general views of the school. The second category of slides was "Unfamiliar People," depicting pleasant scenes of children and adults unknown to the child. The third slide category was "Unpleasant," consisting of pictures judged to be mildly unpleasant to most children. These included the grotesque, clown-like face of a fashion model, a frightened character from a Dr. Seuss book, a closeup of a grasshopper, and the painting "Echo of a Scream" by D.A. Siqueiros which depicts a crying child. The fourth slide category was "Unusual," which included double-exposures and strange photographic effects. It was hoped that the children would regard the Familiar People slides as relatively pleasant, the Unpleasant slides as unpleasant, and the other slides as being in between. The ordering of the slides was chosen by a randomly selected 4 x 4 latin square.

The child was brought to the experiment by his mother. They were greeted by the experimenter (R.B.) and an undergraduate assistant, Miss Janet Worthington. The experimenter reminded the child of the

time the child's picture was taken at school, and asked him if he wanted to see his pictures along with some others. All of the children brought to the laboratory complied, most with enthusiasm.

The child was seated in a room with J.W. facing a 12" x 12" back-lighted screen on a small table. A slide projector focused on the screen was placed on a larger table against the wall opposite the child. A 3" diameter pipe went through the wall under the table. A Sony 3200K camera in the next room was focused on the child's face through this pipe. The camera was virtually undetectable, and none of the children noticed it.

Initially, J.W. asked the child about his game preferences to provide data on sex-role identification. She asked him first if he liked, disliked or didn't care about a series of 20 activities. Six of these activities had been previously categorized as typical of the traditional female role (playing with dolls, cooking), and 5 had been judged as appropriate to the male role (playing soldier, airplanes). J.W. then asked the child to choose which he liked most of a pair of activities, one of which was "masculine" and the other "feminine." There were 10 such forced choices.

While the child was responding to these questions, the experimenter escorted the mother to another room. The mother's room was separated from the child's room by a third room which contained the camera, videotape equipment, and controls for the slide projector. The two walls and closed doors and the distance involved eliminated most of the transmission of sound between the

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child's room and the mother.

The mother sat facing a 18" television receiver which was turned on but the screen was blank. The experimenter explained that the camera was focused on the child, but that he could be seen only when the videotape recorder was turned on. He gave the mother a prepared rating form which was divided into sixteen rows: one for each slide. For each slide, there were places to mark defined by the slide categories Familiar People, Unfamiliar People, Unpleasant, and Unusual. To the right of these were places to mark defined by the adjectives Very Pleasant, Pleasant, Neutral, Unpleasant, and Very Unpleasant. The experimenter stated:

"Name will be looking at a series of sixteen slides. There are four kinds of slides (pointing to the form)-- Familiar People are pictures of name and his friends at school, Unfamiliar People slides are pleasant enough pictures of people he doesn't know, Unpleasant slides are mildly unpleasant, and Unusual slides show strange photographic effects. For each of these slides, I'd like you to watch name's face over TV and try to guess what kind of slide he's watching just by watching his facial expression. I'd also like you to try to rate how pleasant or unpleasant you think each slide made him feel by putting a mark in one of these columns (pointing). Do you have any questions?

The experimenter answered any questions and then proceeded to describe what would be seen on the television set:

I'll turn on the TV just before the slide is turned on. You'll see name just before the slide comes on and see his initial reaction. Janet will ask him questions about the slide--you won't be able to hear his answers because the audio is turned down, but keep watching his face for clues about what he's watching. I'll turn off the TV just after the slide is turned off, so your screen will

go blank. At that point, make your ratings about what kind of slide you think he saw and how pleasant or unpleasant you think his reaction to it was. Do you have any questions?

The experimenter went to the control room and briefly turned on the Sony AV3650 videotape recorder to make sure that the camera was focused properly and give the mother an example of what she would see. He then waited for the child to finish responding to the questions about game preferences.

When the game preference test was over, J.W. turned on the slide projector, positioned her chair so that she sat beside the child facing the screen, and explained to the child about the rating scale he would use. The rating scale consisted of drawings of five faces that went from very happy to very unhappy (See Figure 1).

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 Insert Figure 1 about here  
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She stated:

After the picture goes off, you tell me what you thought of it by pointing to one of these faces. If you really liked the picture and it made you feel really good point to the smiling face (demonstrating). If you really didn't like it at all point to this unhappy face. If you liked or didn't like it a little point to one of these faces. If you didn't feel anything one way or the other point to this face.

The experimenter then presented the first trial. A trial proceeded as follows: the experimenter turned on the videotape recorder and then presented a slide. The child looked at the slide for about five seconds and then J.W. asked "what do you think of that?" or "who's that?" if the child had not yet reacted. After 15-20 more seconds, the experimenter turned off the slide and then

the videotape recorder. J.W. then showed the child the series of faces, asked him how the slide made him feel, and recorded his answer. Throughout the trial, J.W. kept looking at the slide and not the child. This helped to keep the child's attention centered on the slide.

After the 16 trials, the child was brought to the mother's room, the experiment was explained to both, and the child was shown a portion of the videotape of his facial expressions.

The rating sessions with the undergraduate observers were run as follows. The observers were gathered in a classroom with the videotape recorder and 18" receiver at the front of the room. They were given prepared rating forms and instructions similar to those given the mother, and were asked to remain silent while making their ratings. They were shown the videotapes with brief pauses between the trials so they could make their ratings. They were not given feedback about what judgments were correct. Two 50 minute sessions were required, each involving 7-8 children.

#### Dependent Variables.

On each trial, the observer judged what kind of slide the child had seen, and rated on a five-point scale how pleasant or unpleasant the slide had made him feel. This yielded two measures of communication accuracy that are similar to the measures used in studies with adults: (a) the number of slides that the observer could correctly categorize (Categorization Measure), and (b) the Pearson correlation coefficient between the observer's ratings of the child's emotional reaction and the child's own ratings of his emotional reaction along the pleasant-unpleasant scale

(Pleasantness measure).

### Results--Experiment I

#### Ratings of the Slides.

The children rated each slide along a five-point scale by indicating which of the faces in Figure 1 corresponded with their reaction. With larger ratings indicating a negative reaction, the mean rating of the Familiar People slides was 1.41, the rating of the Unfamiliar People slides was 2.48, that of the Unpleasant slides was 2.79, and that of the Unusual slides was 2.46. Mann-Whitney U tests indicated that the Familiar People slides were rated significantly more positive than any of the other three categories of slides ( $p < .05$ ). One of the Unpleasant slides, that of the Dr. Sues character, was rated as being pleasant (its rating was 1.93), and one of the Unfamiliar People slides depicting two men was rated as rather unpleasant (its rating was 3.07). The rest of the slides were rated approximately as anticipated. One child, a boy, failed to give usable ratings: he rated all of the slides as neutral. The overall pattern of ratings suggested that most of the children could use the rating scale and that their reactions to most of the slides were similar to those intended.

#### Communication Accuracy.

The communication accuracy data are summarized in the upper part of Table 1. By chance, an observer should correctly identify four slides (25%) if the child communicates nothing about

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 Insert Table 1 about here  
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them. Chi squares were computed for each sender-observer pairing

and combined to arrive at overall probability figures. This procedure revealed that significant communication occurred when the mother was observing ( $\chi^2 = 24.74$ ,  $df = 15$ ,  $p < .06$ ). A Mann-Whitney U test computed on the raw data indicated that there was no significant difference between boys and girls in the number of slides correctly categorized when the mother was observing.

The chi squares for the pairings with undergraduates were combined for an overall probability figure for each child. This revealed that 3 of the 5 girls and 2 of the 10 boys communicated a significant number of slides to the undergraduates ( $p < .05$ ). This suggested that girls might be superior senders on this measure, but a Mann-Whitney U test indicated that this difference did not attain significance ( $U = 14$ ).

The Pearson correlation coefficients between the child's ratings and each observer's ratings were averaged to obtain overall probability figures. The boy who rated all of the slides as neutral was not included in this analysis. As Table 1 indicates, the average correlations between the child's ratings and his mother's ratings were highly significant. The correlation coefficients for the undergraduates, combined to give a probability figure for each child, revealed that 6 of the 14 children showed significant ( $p < .01$ ) communication. There were no significant differences between male and female senders on this measure.

#### Sex Role Identification.

No significant sex differences in communication accuracy were found in this study. However, clear differences emerged between

boys and girls in the game preference data. On the free choice measure, where the children were asked whether or not they liked a series of activities, male activities were liked equally by boys and girls, while female activities were apparently rejected by boys. Of the 5 male activities, boys said they liked an average of 3.89, while girls liked 3.40 ( $U = 24$ , Not significant). Of the 6 female activities, boys liked 1.33 and girls liked 5.20 ( $U = 1$ ,  $p < .001$ ). On the forced choice measure, both sexes were likely to choose sex-appropriate activities. Boys chose a mean of 8.89 male activities of the ten choices, while the girls chose a mean of only 3.00 male activities ( $U = 3$ ,  $p < .01$ )

#### Discussion--Experiment I

Although the sample of subjects in this experiment is small, the data indicate that it is possible to measure significant non-verbal communication in young children. The data also indicated that there are large individual differences between children in nonverbal expressiveness. A second experiment was designed to replicate the results of the first study and to relate individual differences in expressiveness to other measures of emotional expression.

#### Method--Experiment II

##### Subjects.

Eight males and six females comprising the succeeding class at the preschool served as senders. Their ages ranged from 5 to 6 and the mean age was 66 mo. Two additional children could not be scheduled. Again, the child's mother was the primary observer and the videotapes of the child were judged by seven male and seven female undergraduates.

Procedure.

The experimental procedure was identical to that in Experiment I with the following exceptions. A different person, Miss Marguerite Zetwo, served as undergraduate assistant. Also, the unsuccessful Unpleasant slide of the Dr. Suess character was replaced with a slide showing a crying woman taken from the TAT, and the Unfamiliar People slide seen as unpleasant was replaced. Finally, an attempt was made to measure the child's ability to role-play the facial expressions involved in different emotions.

The measure of role-playing ability was taken after the child had responded to the 16 slides. M.Z. then moved the small table on which the back-lighted projection screen was placed and put her own chair in that position so that the child would face toward the camera when he looked at her. She then said:

I want you to show me what you face looks like when you feel different ways. What does you face look like when you're happy and glad about something? (Pause, with encouragement when necessary.) How about when you're sad and unhappy? (Pause) How about when you're scared and afraid? (Pause) How about when you're surprised at something? (Pause) How about when you're mad and angry about something?

The child's responses to these questions were videotaped and shown to the undergraduate observers after they had rated his responses to the slides. The audio was turned on so that the observers could tell exactly when the questions were asked. They rated each response on a seven-point scale defined by the bipolar adjectives "Appropriate facial response"- "Inappropriate response or no response." They also rated the child's overall role-playing ability along a seven-point scale.

## Results--Experiment II

Ratings of the Slides.

The children rated the modified series of slides as intended. The mean rating of the Familiar People slides was 1.62, that of the Unfamiliar People slides was 2.68, that of the Unpleasant slides was 3.31, and that of the Unusual slides was 2.34. There was no overlap in the distributions of average ratings of the Familiar People slides, the Unpleasant slides, and the rest of the slides. The Familiar People slides were rated as more pleasant than the Unfamiliar People and Unusual slides ( $\underline{U} = 0$ ,  $\underline{p} = .002$ ), and the Unpleasant slides were rated as more unpleasant than the Unfamiliar People and Unusual slides ( $\underline{U} = 0$ ,  $\underline{p} = .002$ ).

Communication Accuracy.

The communication accuracy data are summarized in the lower part of Table 1. For the categorization measure, the chi squares of the child-mother pairing were combined as before, showing that significant overall communication occurred when the mother was observing ( $\chi^2 = 34.73$ ,  $df = 14$ ,  $\underline{p} < .01$ ). There was again no significant difference between boys and girls on this measure when the mother was observing. However, when the undergraduates were observing, girls were better senders on this measure than boys. As before, the chi squares for each pairing were combined to give an overall probability figure for each child, revealing that 5 of the 6 girls vs. only 3 of the 8 boys showed significant ( $\underline{p} < .05$ ) communication. A Mann-Whitney  $\underline{U}$  test indicated that this sex difference was significant ( $\underline{U} = 10$ ,  $\underline{p} = .041$ ).

The correlation coefficients between the child's ratings and each observer's ratings were averaged as before. As Table 1 indicates, the average correlations between the child's ratings and his mother's ratings were again highly significant. The average correlation coefficients of the undergraduates for each child indicated that 8 of the 14 children showed significant ( $p < .01$ ) communication. As before, there were no significant differences between the girls and boys on this measure of communication.

#### Sex Role Identification.

The pattern of results on the game preference measure was similar to that in the first study. Girls liked the female activities more than did boys ( $U = 0$ ,  $p < .001$ ), boys liked male activities somewhat more than did girls ( $U = 8$ ,  $p = .021$ ), and boys chose more male games than did girls ( $U = 0$ ,  $p < .001$ ).

#### Role Playing.

The mean ratings by the undergraduates of the appropriateness of the child's facial responses when asked to role-play are presented in Table 2. Girls and boys showed a similar ordering in their rated ability to enact the expressions appropriate to

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 Insert Table 2 about here  
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different emotions. They were best at showing happiness and progressively worse at enacting sadness, surprise, fear, and anger. Multiple sign tests, done with the criterion of significance set at  $p < .01$ , indicated that the expressions of happiness were rated significantly more appropriate than those of fear and anger. There

were no significant differences between boys and girls on rated of role-playing ability.

#### Individual Differences.

As in the previous experiment, marked differences between children in their ability to send accurate nonverbal messages was noted. These differences were consistent across the different measures of sending ability used in this study. Table 3 shows that all of the intercorrelations between the different measures were positive and most were significant, so that a child who was

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Insert Table 3 about here  
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a poor sender when observed by undergraduates also tended to be a poor sender to his mother and be rated as poor in role-playing.

These measures of sending ability were correlated with the child's scores on the Minnesota Child Development Inventory. Few significant relationships were found, perhaps because all of the children in the sample attained high scores on the inventory and the range on that variable was restricted.

To further explore the meaning of the individual differences in sending ability, a 36-item scale was constructed from the results of previous experiments that investigated internalizing vs. externalizing modes of response to emotion (Block, 1957; Learmonth, Ackerley, and Kaplan, 1959; Jones, 1935; 1960; Lanzetta and Kleck, 1970; Buck et. al., 1972; 1973). The scale consisted of a series of statements, most of which referred to attributes previously found to distinguish "internalizers" and "externalizers." For example, different

items asked whether the stimulus person "plays alone most of the time," "often shows aggression," "is co-operative," etc. The rater was asked to judge whether each attribute was always, often, sometimes, rarely, or never characteristic of the stimulus person.

This scale was given to three teachers at the nursery school who were familiar with all of the children but who did not know the results of the communication experiment. Their ratings of the 14 children on each item were correlated with the childrens' sending ability. These correlations were then averaged across the three teachers, and probability figures were computed. This procedure indicated that, with boys and girls analyzed separately, and using all measures of expressiveness, sending ability was significantly related to a number of other kinds of emotional expression. In particular, sending ability was positively related to ratings of a high activity level, direct expression of hostility, and being an "extravert." Sending ability was negatively related to rated co-operation, emotional control, and solitary play.

The relationships between the teachers' ratings and three of the measures of sending ability are summarized in Table 4. One feature stands out from this data. Sending ability was related to

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 Insert Table 4 about here  
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a number of characteristics that might potentially disturb social relationships, such as bossiness, impulsivity, aggressiveness, and low co-operation. However, sending ability was also related to having many friends at the school, and it was negatively related

to shyness and solitary play.

### Discussion

The experiments establish that it is possible to measure nonverbal expressiveness or sending ability in young children in a brief testing session that was enjoyed by most children, and that it is possible to use special rating scales with children of this age in the process of this measurement. The experiments did not find evidence of a large sex difference in expressiveness in these children. They did find initial indications that the present measures of nonverbal expressiveness are related to other kinds of emotional behavior.

### Sex Differences

The game preference measure was included in these experiments to determine whether these children were in fact influenced by the traditional sex-role in the face of possible current concern about sexual stereotyping among their parents. The data indicate that these children showed a very strong tendency to choose sex-appropriate games, suggesting that they have indeed been affected by the traditional sex roles, at least in this respect. Thus whatever the reason for the lack of a large sex difference in sending ability in these experiments, it was probably not because of a lack of traditional sex-role identification among these children.

It may be that the children in this experiment were simply too young to show a sex difference in expressiveness. Assuming that the learning of sex-appropriate patterns of expressive behavior is in fact the cause of the sex difference in sending ability among

adults, it might be expected that such learning is more difficult and takes more time than the learning of sex-appropriate games. Also, in Experiment II, the undergraduate observers guessed the kind of slide being viewed by the girls more accurately than they did the boys. Perhaps this indicates the initial emergence of the eventually greater sending ability of women. This can be investigated in experiments using older groups of children.

#### Role-Playing Ability.

The fact that the undergraduate observers' ratings of role-playing ability was related to the measures of communication accuracy is interesting, although it should be noted that the observers made these ratings after they had seen the child respond to the 16 slides, and it is possible that their impressions of the child's communication accuracy may have influenced their rating of his role-playing ability. The lower ability of the children to role-play the emotions of fear and anger was not predicted, but it is consistent with the general contention that socialization inhibits the expression of socially undesirable emotions. A similar finding has been reported by Odom and Lemond (1972), although these investigators found that children could produce appropriate expressions of anger.

One interesting aspect of the role playing data might be noted. Figure 4 shows that among girls, the teacher's ratings were related more closely to the measures of spontaneous facial expressiveness than they were to the ratings of role playing ability, while among boys the opposite was the case. This pattern of

relationships was not predicted and any attempt at explanation must be very tentative. However, one might speculate that the behavior the teacher saw in the nursery school was more based upon natural expressiveness than role playing in girls, and more based upon role playing than natural expressiveness in boys. This would be consistent with the hypothesis that the socialization of emotional expression is more severe among males in our culture.

#### Individual Differences

The pattern of relationships between sending ability and the teachers' ratings depicted expressive children as being sociable and having many friends, even though they are also often impulsive, aggressive, bossy, and hard to get along with. This picture of the outgoing but impulsive externalizer and the responsible but inhibited internalizer is consistent with the results of other studies using very different procedures and populations of subjects. For example, Jones (1960) found among adolescents (ages 12-18) that "high GSR reactors" (internalizers) were quiet, reserved, good-natured and co-operative, while "low GSR reactors" (externalizers) were talkative, animated, active and impulsive. Block (1957) found among medical school applicants that high reactors were, among other things, mannerly, submissive, and withdrawing; low reactors were independent, ingenious, and rebellious. Recently, Crider and Lunn (1971) found electrodermal lability to be negatively related to extraversion and impulsivity.

The fact that these attributes taken from the literature were found to relate to the present measures of sending ability in children suggests that these measures can be meaningfully used

to study the development of internalizing and externalizing modes of emotional expression. The present results also suggest a tentative hypothesis to guide such a study. We have seen that sending ability in adults has been related to personality differences involving intraversion-extraversion and self esteem, and to sex differences. In young children, a relationship with emotional behaviors which seem relevant to these personality differences is present while a sex difference is not. If one makes the assumption that the behavior of these young children is more based upon innate temperamental propensities and less based upon socialization than the behavior of adults, it suggests the hypothesis that the personality difference in facial expressiveness may be based upon innate factors while the sex difference is based upon socialization. This is, of course, offered as a very tentative hypothesis pending more data.

#### The Measurement of Sending Ability.

As the present paradigm for measuring sending ability is like all others dependent upon the particular procedures of measurement, it might be well to discuss and give the rationale for these procedures. Frijda's (1969, pp. 172-176) analysis of studies of emotional recognition accuracy can be applied to this problem. Frijda points out that studies of recognition accuracy differ according to several dimensions: (a) the nature of the stimuli employed, (b) the range of those stimuli, (c) the nature of the task confronting the observer, (d) the responses permitted

to the observer, and (e) the computation of accuracy scores. The following paragraphs describe and give the rationale for the approach that the present paradigm makes in each of these areas.

1. Regarding the nature of the stimuli, the present approach shows observers the televised sequences of the spontaneous expressions of senders to different kinds of emotionally loaded slides. The use of such stimuli avoids the criticisms leveled against studies using posed expressions and/or single photographs.

2. Regarding the range of stimuli employed, this approach samples a number of different stimulus emotions by showing the sender different kinds of slides. Thus, there is at least some attempt to approach the problems of sampling different kinds of emotions that have been pointed out by Brunswik (1956) and others.

3. Frijda has distinguished three kinds of tasks that have been used in recognition studies. "Situational reference" consists of identifying the kind of situation that evokes the stimulus emotion, "action anticipation" consists of anticipating the sender's behavior, and "emotional experience" involves labeling or rating the stimulus emotion directly (Frijda, 1969). The present approach provides both a situational reference task, in that the observer chooses the kind of slide that evoked the sender's response, and an emotional experience task, in that the observer rates the sender's emotional experience directly.

4. The responses permitted to the observer include choosing which kind of slides was presented on each trial, and rating the pleasantness of the sender's emotional response. Observers have

readily grasped the meaning of these tasks, they have been able to respond quickly, and these responses have been found to be useful in measuring communication accuracy in several studies.

5. The scoring system allows for the computation of accuracy scores whose significance can be tested. The "Categorization measure" of the number of correct categorizations of slides relative to chance can be evaluated for each subject by chi square tests, and then combined for group chi squares (McNemar, 1955). The "Pleasantness measure" consists of a correlation coefficient computed between the sender's and observer's ratings of the sender's emotional experience. The significance of the individual correlation coefficients may be tested, and they can be transformed to  $z$  scores and averaged to obtain group correlation indices (McNemar, 1955).

## References

- Block, J. A study of affective responsiveness in a lie detection situation. Journal of Abnormal and Social Psychology, 1957, 55, 11-15.
- Brunswik, E. Perception and the representative design in psychological experiments. Berkeley: University of California Press, 1956.
- Buck, R., Savin, V., Miller, R. E., & Caul, W. F. Nonverbal communication of affect in humans. Journal of Personality and Social Psychology, 1972, 23, 362-371.
- Buck, R., Miller, R. E., & Caul, W. F. Sex, personality, and physiological variables in the communication of emotion via facial expression. Journal of Personality and Social Psychology 1973, in Press.
- Crider, A., & Lunn, R. Electrodermal lability as a personality dimension. Journal of Experimental Research in Personality, 1971, 5, 145-150.
- Frijda, N. H. Recognition of emotion. In L. Berkowitz, (Ed.), Advances in Experimental Social Psychology, Vol. 4. New York: Academic Press, 1969.
- Izard, C. E. The face of emotion. New York: Appleton Century Crofts, 1971.
- Jones, H. E. The galvanic skin response as related to overt emotional expression. American Journal of Psychology, 1935, 47, 241-251.

Jones, H. E. The longitudinal method in the study of personality.

In I. Iscoe and H. W. Stevenson (Eds.) Personality Development in Children. Chicago: University of Chicago Press, 1960.

Lanzetta, J. T. & Kleck, R. E. Encoding and decoding of nonverbal affect in humans. Journal of Personality and Social Psychology, 1970, 1b, 12-19.

Learmonth, G. J., Ackerly, W., & Kaplan, M. Relationships between palmar skin potential during stress and personality variables. Psychosomatic Medicine, 1959, 21, 150-157.

McNemar, Q. Psychological Statistics. New York: Wiley, 1955.

Miller, R. E., Caul, W. F., & Mirsky, I. A. Communication of affects between feral and socially isolated monkeys. Journal of Personality & Social Psychology, 1967, 7, 231-239.

Odom, R. D., & Lemond, C. M. Developmental differences in the perception and production of facial expressions. Child Development, 1972, 43, 359-369.

Patterson, M. L. Stability of nonverbal immediacy behaviors. Journal of Experimental Social Psychology, 1973, 9, 97-109.

Vine, I. Communication by facial-visual signals. In J. H. Crook, (Ed.), Social behavior in birds and mammals. New York: Academic Press, 1970.

## Footnotes

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<sup>2</sup>This paper will use the following terminology: "Nonverbal expressiveness" is a general concept defined in terms of "sending ability," which is measured primarily by "communication accuracy" and also "role-playing ability."

Table 1

Summary results from four measures of communication accuracy.

Sender		Mother's Rating		Mean values from ratings by undergraduates	
		Categorization Measure	Pleasantness Measure	Categorization Measure	Pleasantness Measure
Study #1	Girls (n=5)	34%	+.57**	34%	+.16
	Boys (n=10)	36%*	+.32**	29%	+.27
Study #2	Girls (n=6)	41%**	+.33**	40%	+.28
	Boys (n=8)	37%*	+.27**	33%	+.16

Note. - Probability figures below refer to mother's ratings only.

See text for discussion of significance levels for undergraduates.

\*  $p < .05$

\*\*  $p < .01$

Table 2

Mean ratings of the appropriateness of the childrens' enactments of different emotions. (High rating indicates appropriate enactment).

Sex of child	Happy	Sad	Suprised	Afraid	Angry	Overall rating: Role-Playing Ability
Girls	3.67	3.36	2.98	2.68	1.77	2.88
Boys	3.99	3.49	2.92	2.69	2.44	3.12
Average	3.87 <sup>a</sup>	3.44 <sup>ab</sup>	2.94 <sup>ab</sup>	2.69 <sup>b</sup>	2.18 <sup>b</sup>	

Note. - Differences between emotions were tested by multiple sign tests.

Cells with subscripts in common were not significantly different from one another at the .01 level of confidence.

Table 3

Interrelationships between four measures of communication accuracy  
and rated role playing ability

	Mother Cat. Measure	Mother Pleas. Measure	Und. Cat. Measure	Und. Pleas. Measure	Overall Rating: Role Playing
Mother-- Categorization Measure	---	+.49*	+.55**	+.40	+.32
Mother-- Pleasantness Measure		---	+.24	+.74***	+.54*
Undergraduates-- Categorization Measure			---	+.58**	+.19
Undergraduates-- Pleasantness Measure				---	+.38

\*  $p < .05$

\*\*  $p < .025$

\*\*\*  $p < .01$

## Relationships between teachers' ratings and measures of nonverbal sending ability

Teacher's Rating	Girls (n=6)			Boys (n=8)		
	Overall Rating: Role-Playing	Mother's Pleasantness Measure	Rater's Pleasantness Measure	Overall Rating: Role-Playing	Mother's Pleasantness Measure	Rater's Pleasantness Measure
	Items negatively correlated with sending ability					
Plays along much of the time.	-47	-44	-34	-66***	-85***	-50**
Is shy, fear strangers.	-54	-64**	-62**	-54	-14	-09
Keeps to himself.	-41	-43	-34	-62***	-77***	-54**
Is emotionally inhibited.	-42	-52*	-50*	-44**	-19	-23
Controls his emotions.	-42	-76*	-84**	-72***	-51**	-34
Is quiet and reserved.	-35	-56**	-61**	-57***	-12	-23
Is co-operative.	-27	-65**	-79***	-70***	-42*	-25
Is an "Introvert."	-46	-59**	-61**	-65***	-33	-41*
	Items positively correlated with sending ability					
Often shows aggression.	+43	+68***	+81***	+66***	+31	+22
Has a high activity level.	+12	+78***	+82***	+54***	+12	+01
Has many friends at the school.	+80***	+78***	+73***	+35	+44*	+32
Expresses his feelings openly.	+62*	+64**	+68**	+51***	+07	-01
Is impulsive.	+31	+47*	+46*	+69***	+23	+24
Is often difficult to get along with	+43	+71***	+78***	+53**	+21	+27
Expresses his hostilities directly	+35	+55**	+54*	+83***	+68***	+48**
Tends to be rebellious and nonconforming.	+30	+52**	+68***	+72***	+11	-11
Is bossy.	+15	+60**	+67***	+69***	+18	+16
Often dominates other children.	+24	+52*	+65***	+54**	+14	+19
Is an "extravert."	+41	+59**	+63**	+57**	+38	+11

Note. - Correlations in the table are the averaged correlations of three teachers.

\*  $p < .05$

\*\*  $p < .025$

\*\*\*  $p < .005$

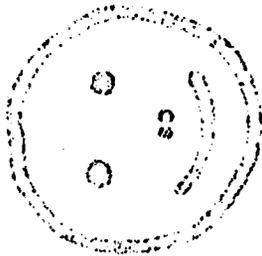
Figure Caption

Fig. 1. Scale used by the child to rate his emotional experience.

Point to the picture that shows how the slide made you feel.



VERY  
HAPPY



HAPPY



NEUTRAL



UNHAPPY



VERY  
UNHAPPY