

DOCUMENT RESUME

ED 224 346

FL 013 392

AUTHOR Fishman, Joshua A.
 TITLE The Acquisition of Biliteracy: A Comparative Ethnography of Four Minority Ethnolinguistic Schools in New York City. Final Report (Second/Final Part).
 INSTITUTION Yeshiva Univ., New York, N.Y. Ferkauf Graduate School of Humanities and Social Sciences.
 SPONS AGENCY National Inst. of Education (ED), Washington, DC.
 PUB DATE Aug 82
 GRANT NIE-G-79-0122
 NOTE 42p.; For related document, see FL 013 391.
 PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS Armenian; Bilingual Education; Bilingualism; *Bilingual Schools; Classroom Observation Techniques; Elementary Secondary Education; English; *Ethnic Groups; Ethnography; French; Greek; Hebrew; Language Acquisition; *Language Skills; Oral Language; *Orthographic Symbols; Private Schools; Reading Skills; Religious Cultural Groups; Sociolinguistics; Speech Skills; *Teaching Methods; Writing Skills; *Written Language
 IDENTIFIERS *New York (New York)

ABSTRACT

Factors that might influence the acquisition of biliteracy were studied in four schools in the Greater New York Metropolitan Area (an Armenian-English school, a Greek-English school, a Hebrew-English school, and a French-English school). This report is the final part of a two-part report and deals with the tabulation and analysis of ethnographic observations. The effect of studying two different scripts was a major concern of the research, which employed a school ethnography approach (Green and Wallat, 1981). Observational data for four grades in the four schools were coded for additional analysis. Findings include the following: (1) writing system differences were reduced by emphasizing the printing system (whether by reading or writing print), particularly in the earliest grades; (2) reading received the most attention, followed by writing, and speaking; (3) little evidence was found of either out-of-school participation in literacy acquisition or of topical emphasis on matters pertaining to home or community; (4) out-of-school influences on literacy acquisition, though small, occurred primarily for the ethnic language; (5) little awareness or concern was found for nonschool dialect, interlanguage contrasts, or interlanguage variation; (6) for instruction in French and Hebrew, teacher-made materials were more commonly employed than were basal readers, whereas the opposite was true for English instruction; (7) the Greek school stressed choral reading; (8) the French school used individual reading more than did the other schools; and (9) the Hebrew school stressed analytic decoding in both languages more than synthetic zones. (SW)

9427203
ED224346

FINAL REPORT
(Second/Final Part)

NIE Grant Number G-79-0122

THE ACQUISITION OF BILITERACY: A COMPARATIVE
ETHNOGRAPHY OF FOUR MINORITY ETHNOLINGUISTIC
SCHOOLS IN NEW YORK CITY

Joshua A. Fishman
Principal Investigator
Yeshiva University
Ferkauf Graduate School
New York, N.Y.
10003

with the assistance of

Carole Riedler-Berger

J. Mark Steele

August 1982

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION

A

TABLE OF CONTENTS

1.0	Introduction: Procedural Note	1
2.0	General Background	3
3.0	Sociographic Issues	5
4.0	Proportionality of Language Emphases: Reading, Writing, Speaking	8
5.0	Decoding Strategies	10
6.0	Class, Group or Individual Instruction	14
7.0	Type of Reading Materials	17
8.0	Oral Reading	19
9.0	Where Literacy is Learned: Home vs. School (The Sociofunctional Dimension)	21
10.0	Topical Emphases (Ethnic/Non-Ethnic) of Teaching/Learning Materials	24
11.0	The Sociolinguistic Dimension: Dialect Differences	27
12.0	Cross-Language Contrasts	29
13.0	Interlingual Interferences, Aids and Switching	31
14.0	Summary and Conclusions	33
15.0	Methodological Postscript	36
16.0	Bibliography	39

THE ACQUISITION OF BILITERACY: A COMPARATIVE
ETHNOGRAPHY OF FOUR MINORITY ETHNOLINGUISTIC
SCHOOLS IN NEW YORK CITY

Joshua A. Fishman
Principal Investigator
Yeshiva University
Ferkauf Graduate School
New York, N.Y.
10003

with the assistance of

Carole Riedler-Berger

J. Mark Steele

August 1982

1.0 Introduction: Procedural Note

As foreseen in the first part of this report (Fishman, Riedler-Berger, Koling and Steele, February 1982), this second and final part deals with the tabulation and analysis of ethnographic observations. As such, it will be a "free-standing" report, dealing with its own methods, findings and conclusions, and will relate to the "first part" report only in passing.

The present "second part" focuses upon the translation of ethnographic observations initially made by three ethnographers in four different schools. No single school was the province of any single ethnographer and the ethnographic project staff frequently met with one another and with the project director to discuss their observations and impressions and to either resolve differences of opinion or to agree on the types of further observations that were needed (including focused discussions and interviews) so that these differences could be resolved on an empirical basis.

Due to illnesses and other emergencies of a personal nature, roughly half a year elapsed from the completion of all observations ("data collection") until the time that the coding of these observations began. Initially, two coders (both of whom had previously served

as ethnographers) independently coded the same ethnographer data and then compared their codings in order to determine discrepancies in output and difficulties in the coding design. The coding manual was then revised and the process of independent "try-out" coding was recommenced. At this point, one ethnographer left to resettle in Israel and, therefore, was no longer available for further participation in the coding process. All of the coding upon which this report is based is, therefore, derived from the efforts of one ethnographer, coding her own earlier observations as well as the observations of two other ethnographers. Although a few further minor revisions in the coding manual were still made as coding progressed (necessitating some recoding of passages coded earlier), the manual remained essentially unaltered after its initial major revision.

Coding the mass of observational data obtained on four or so grades in four different schools was a slow and difficult operation that required roughly half a year. An observational unit (an "occurrence") was operationally defined as any field note reference to a dimension of concern to the project and provided for in the coding manual. Each "occurrence" was initially coded directly on the page of the observational protocol ("ethnographic record") on which it was encountered. Each coded "occurrence" was later also cut out and pasted upon a separate data card. As a result, we could ultimately examine "occurrences" in two ways: (a) in their original sequential imbeddedness in the total ethnographic record (contextualized occurrence) and (b) separated from any surrounding context (decontextualized occurrences). While the data in format (b), above, was useful for

tabulation purposes, the data in format (a) needs to be consulted recurringly in order to fully understand why an "occurrence" was coded as it was. All in all, slightly more than a thousand "occurrences" were recognized (1014 to be exact), the exact number varying from one dimension of interest to another due to the fact that in schools, as in society more generally, all possible "occurrences" are not encountered equally often.

2.0 General Background

2.1 Given our focus on literacy acquisition, our "occurrences" are derived disproportionately from the first grade, many fewer being derived from kindergarten ("reading readiness") or second grade, and least of all from nursery or third grade and above. In addition, a goodly number of literacy related "occurrences" were ungraded, i.e. they pertained to the halls, cafeteria, library, auditorium, playground or other locations and situations in which children, teachers or other "actors" of various grades were co-present.

2.2 Although our observations were spread out throughout the entire school year and during all of one year and the first quarter of a second year, they nevertheless displayed both some inadvertent as well as some advertent "bunching." Thus, entirely by design, the lion's share of our observations (and, therefore also of our "occurrences") occurred during the first year of study, since the second year's quarter was merely that (a quarter rather than a school year). and was intended for specific follow-up purposes only. However, quite inadvertently, it developed upon analysis that most of our observations had occurred in mid-year (January to March) with somewhat

few coming early in the school year (September-December) and fewer yet toward the end of the school year (April-June). Upon reflection, it seems clear why the above-mentioned bunching of observations occurred. The beginning and the end of the school year were taken up with administrative/organizational activities and with various ritual events that did not yield "occurrences" pertaining to our dimension of inquiry. In addition, the end of the school year coincided with final examinations for our ethnographers and these cut down on the observational opportunities available to them. It may very well be, therefore, that literacy acquisition phenomena that are peculiarly end-of-semester related are under-represented in our data.

2.3 Insofar as our data pertain to or derive from academic specialists, they are largely teacher-focused, both in terms of observations and interviews. On the other hand, they also include a modicum of "occurrences" involving principals, counselors and reading specialists. With respect to non-academic personnel, the lion's share of our data pertain to observations of or interviews with students. Nevertheless, in each school a modicum of data pertain to parents, community lay and/or religious leaders and school volunteers. Although the percentages are not the same from school to school (nor from grade to grade), it is still clear that in all instances our "occurrences" primarily consist of observations of (and, secondarily, of interviews with) pupils and teachers and of ethnographic interpretations and reflections upon these observations.

3.0 Sociographic Issues

One of our primary dimensions of concern is that which we have called sociographic (earlier: "ethnoGRAPHIC"; see Fishman 1980). This dimension asks whether the acquisition of biliteracy is differentially impacted by writing-system/printing-system differences. Hebrew, Greek/Armenian and French may be said to be ordered on a continuum of decreasing sociographic divergence from English. Our global impression, based upon months of observation, was that students in the Hebrew and Greek schools had no more difficulty reading and writing both English and their ethnic mother tongues than did students in the French. In other words, with respect to mastering the various graphic systems employed in the ethnolinguistic schools we have studied, it was our impression that divergence or proximity to English made no noticeable difference in the rate or level of literacy acquisition by the time the second or third grade was reached.* Let us now see whether sociographic "occurrences" in these various schools (and in their various grades and languages) differ in frequency or not.

3.1 Table IA reveals the distribution of sociographic "occurrences" across languages. A little under a third of all sociographic "occurrences" pertained to English, a little over a half to the ethnic tongues (hereinafter: EMT). The remaining 12% pertained to contexts in which both languages were involved. In all cases (English, EMT or both), most "sociographic occurrences" pertain to (c) writing print or (a) reading print or (a,c) both reading and writing print.

The progression of frequencies is in that order in all cases. Clearly

*Our curtailed observations in a Chinese school did lead us to the conclusion that a considerably more prolonged period of biliteracy acquisition was necessary there more than in any of the other schools.

TABLE IA: Sociographic Foci* by Language

Language	n	a %	b %	c %	d %	a,c %	b,d %	+	n	Row Total %
<u>ENGLISH</u>	10		1	19	2	7	0	2	41	
Row %		24.4	2.4	46.3	4.9	17.1	0.0	4.9		
Col %		33.3	16.7	38.8	40.0	30.4	0.0	20.0		31.8%
<u>ENT</u>	16		4	25	3	14	6	4	72	
Row %		22.2	5.6	34.7	4.2	19.4	8.3	5.6		
Col %		53.3	66.7	51.0	60.0	60.9	100.0	40.9		55.8%
<u>BOTH</u>	4		1	5	0	2	0	4	16	
Row %		25.0	6.3	31.3	0.0	12.5	0.0	25.0		
Col %		13.3	16.7	10.2	0.0	8.7	0.0	4.0		12.4%
<u>COLUMN TOTAL</u>	30		6	49	5	23	6	10	129	
%		23.3	4.7	37.9	3.9	17.8	4.7	7.8		100.0%

TABLE IB: Sociographic Foci by School*

School	n	a %	b %	c %	d %	a,c %	b,d %	+	n	Row Total %
<u>ARMENIAN</u>	9		1	10	3	4	0	0	27	
Row %		33.3	3.7	37.0	11.1	14.8	0.0	0.0		
Col %		30.0	16.7	20.4	60.0	17.4	0.0	0.0		21.0%
<u>Row %</u>	11		0	15	0	5	0	4	35	
Row %		31.4	0.0	42.9	0.0	14.3	0.0	11.4		
Col %		36.7	0.0	30.6	0.0	21.7	0.0	40.0		27.1%
<u>HEBREW</u>	6		5	9	1	4	6	3	34	
Row %		17.6	14.7	26.5	2.9	11.8	17.6	8.8		
Col %		20.0	83.3	8.4	20.0	17.4	100.0	30.0		26.4%
<u>FRENCH</u>	4		0	15	1	10	0	3	33	
Row %		12.1	0.0	45.5	3.0	30.3	0.0	8.8		
Col %		13.3	0.0	30.6	20.0	43.5	0.0	30.0		25.6%
<u>COLUMN TOTAL</u>	30		6	49	5	23	6	10	129	
%		23.3	4.7	37.9	3.9	17.8	4.7	7.8		100.0%

TABLE IC: Sociographic Foci by Grade*

Grade	n	a %	b %	c %	d %	a,c %	b,d %	+	n	Row Total %
<u>N/K</u>	10		0	17	0	9	0	0	36	
Row %		27.8	0.0	47.2	0.0	25.0	0.0	0.0		
Col %		33.3	0.0	34.7	0.0	39.1	0.0	0.0		27.9%
<u>1</u>	19		3	22	0	10	6	6	66	
Row %		28.8	4.5	33.3	0.0	15.2	9.1	9.1		
Col %		63.3	50.0	44.9	0.0	43.5	100.0	60.0		51.2%
<u>2</u>	0		0	3	1	2	0	1	7	
Row %		0.0	0.0	42.9	14.3	28.6	0.0	14.3		
Col %		0.0	0.0	6.1	20.0	8.7	0.0	10.0		5.4%
<u>3</u>	1		2	0	0	0	0	0	3	
Row %		33.3	66.7	0.0	0.0	0.0	0.0	0.0		
Col %		3.3	33.3	0.0	0.0	0.0	0.0	0.0		2.3%
<u>NON GRADE</u>	0		1	7	4	2	0	3	17	
Row %		0.0	5.9	41.2	23.5	11.8	0.0	17.6		
Col %		0.0	16.7	14.3	80.0	8.7	0.0	30.0		13.1%
<u>COLUMN TOTAL</u>	30		6	49	5	23	6	10	129	
%		23.3	4.7	37.9	3.9	17.8	4.7	7.8		100.0%

*a = reading print; b = reading writing; c = writing print; d = writing writing;
+ = other (subsumes 4 categories)

the printing system is treated as primary and the writing system as secondary. This is reflected by the meager percentages in either (b) reading writing, (d) writing writing or (b,d) both reading and writing writing.

3.2 Table IB reveals that the above mentioned tendency to give priority to the printing system obtains not only both for English and for the EMTs but in all four schools. It is most striking in the Greek and French schools where the fewest number of sociographic "occurrences" were encountered pertaining to the writing system. It is least true in the Hebrew school (where only 55% of all "occurrences" pertain only to the printing system and were 34% of all "occurrences" pertain only to the writing system). This might imply that although all schools initially stress the printing system over the writing system, there is, nevertheless, proportionately more attention given to writing systems when they differ maximally from each other as in the Hebrew-English case.

3.3 Finally, grade also seems to be a consideration in accounting for the disproportionate attention given to the printing system. In the earliest grades (nursery/kindergarten and first grade), there are virtually no "occurrences" that involve the writing system, most particularly insofar as writing the writing system is involved. Indeed, the most sizable proportion of sociographic "occurrences" involving the writing system in the early grades is "ungraded," i.e. such "occurrences transpire not in the classroom proper but in hallways, cafeteria, library, etc., where written notices or posters are dis-

played. The writing system is thus generally emphasized later rather than earlier and in out-of-grade contexts rather than in grade, whereas the printing system is both emphasized earlier (for reading as well as for writing) and in more classroom focused contexts.

4.0 Proportionality of Language Emphases: Reading, Writing, Speaking

4.1 From the point of view of the focus of classroom activity, there appears to be much more attention given to reading than either to writing or to speaking (Table IIA), and this is true regardless of medium of instruction (English, EMT or both). Apparently, many of the "occurrences" of "writing the printing system" that we reviewed earlier are for the purpose of reading rather than for the purpose of writing per se. Indeed, speaking too is a more common focus than writing in the early grades, particularly when an EMT is either the medium or co-medium of instruction. This is doubtlessly a reflection of the fact that all the schools we are studying (and particularly the French and Hebrew schools) have a contingent of pupils for whom the EMT is unknown (and a smaller contingent for whom English is unknown) when they arrive in school. Relative to reading and speaking, writing is given negligible attention indeed in the grades we have studied.

4.2 Table IIB confirms the fact that the reading > speaking > writing progression holds in every school. Table IIC adds to this picture by revealing that speaking is stressed somewhat more in nursery/kindergarten (i.e. at the pre-reading stage), in second grade (after the first grade emphasis on reading) and in non-graded (out of class) contexts. All in all, therefore, it would appear from both

TABLE IIA. LANGUAGE LEARNING SKILLS* BY LANGUAGE

Language	L	R	S	LR	LS	RS	RW	LRS	LRSW	+	n	Total %
SPANISH	44	135	19	19	5	13	11	1	3	14	254	30.0%
Low %	17.3	23.1	7.5	7.5	2.0	5.1	4.3	.39	1.2	1.0		
Std %	21.3	33.5	19.2	31.7	15.2	21.0	37.9	8.3	21.4	30.8		
FR	116	122	47	23	21	34	7	8	7	5	390	
Low %	29.7	31.3	12.1	5.9	5.4	8.7	1.8	2.1	1.3	1.3		
Std %	36.3	39.2	30.2	30.2	27.2	37.3	37.8	6.7	30.2	30.2		
ITAL	47	53	35	18	7	15	1	3	4	14	187	
Low %	25.1	28.3	18.7	9.0	3.7	8.0	.53	1.0	2.1	2.1		
Std %	22.7	17.1	34.7	30.0	21.2	24.2	5.3	25.0	23.0	30.8		
COLUMBIAN SPANISH	207	310	101	60	33	62	19	12	14	13	831	22.0%
Low %	24.9	37.3	12.2	7.2	4.0	7.5	2.3	1.4	1.7	1.0		
Std %												100.0%

TABLE IIB. LANGUAGE LEARNING SKILLS BY SCHOOL

School	L	R	S	LR	LS	RS	RW	LRS	LRSW	+	n	Total %
UNIVERSITY	45	50	25	9	21	21	5	5	0	5	185	
Low %	24.3	27.0	13.5	4.3	11.4	11.4	2.7	2.7	0.0	2.7		
Std %	21.7	16.1	24.3	13.3	63.6	33.9	26.3	41.7	0.0	38.5		22.0%
WASH	85	93	17	22	4	9	2	2	3	7	244	
Low %	34.3	38.1	7.0	9.0	1.6	3.7	.82	.82	1.2	2.9		
Std %	41.1	30.0	16.8	36.7	12.1	14.5	10.5	16.7	21.4	53.8		29.4%
REGENCY	46	97	30	28	7	19	9	4	4	1	245	
Low %	18.8	39.0	12.2	11.4	2.9	7.8	3.7	1.6	1.6	.41		
Std %	22.2	31.3	29.7	40.7	21.2	30.6	47.4	33.3	28.6	7.7		29.5%
FRANCIS	31	70	29	2	1	13	3	1	7	0	157	
Low %	19.7	44.6	18.5	1.3	.64	8.3	1.9	.64	4.6	0.0		
Std %	14.9	22.6	28.7	3.3	3.0	21.0	15.8	8.3	50.0	0.0		18.9%
COLUMBIAN SPANISH	207	310	101	60	33	62	19	12	14	13	831	831
Low %	24.9	37.3	12.2	7.2	4.0	7.5	2.3	1.4	1.7	1.0		
Std %												100.0%

TABLE IIC. LANGUAGE LEARNING SKILLS BY GRADE

Grade	L	R	S	LR	LS	RS	RW	LRS	LRSW	+	n	Total %
1st	28	55	25	10	8	13	1	1	0	3	144	
Low %	19.4	38.2	17.4	6.9	5.6	9.0	.69	.69	0.0	2.1		
Std %	13.5	17.7	24.8	16.7	24.2	21.0	5.3	9.3	0.0	23.1		17.5%
2nd	59	193	40	19	15	34	8	6	7	5	386	
Low %	15.3	50.0	10.4	4.9	3.9	8.9	2.1	1.0	1.3	1.3		
Std %	23.5	62.3	39.6	31.7	45.5	54.8	42.1	50.0	50.0	38.5		46.5%
3rd	25	37	16	13	4	3	4	1	2	3	113	
Low %	22.1	32.7	14.2	11.5	3.5	7.1	3.5	.38	1.3	2.7		
Std %	12.1	11.9	15.8	21.7	12.1	12.9	21.1	8.3	14.3	33.1		13.0%
4th	7	4	1	7	0	3	1	1	0	1	25	
Low %	29.0	16.0	4.0	28.0	0.0	12.0	4.0	4.0	0.0	4.0		
Std %	3.4	1.3	.99	11.7	0.0	4.8	5.3	8.3	0.0	7.7		3.0%
5th GRADE	88	21	19	11	6	4	0	3	0	1	163	
Low %	54.0	12.9	11.7	6.7	3.7	2.5	3.1	1.8	3.1	.61		
Std %	42.5	6.3	18.8	18.3	13.2	6.3	26.3	25.0	35.7	7.7		19.0%
COLUMBIAN SPANISH	207	310	101	60	33	62	19	12	14	13	831	831
Low %	24.9	37.3	12.2	7.2	4.0	7.5	2.3	1.4	1.7	1.0		
Std %												100.0%

TABLE IIC (2): NON GRADE LANGUAGE LEARNING SKILLS BY LANGUAGE

Language	L	R	S	LR	LS	RS	RW	LRS	LRSW	+	n	Total %
SPANISH	10	13	3	2	1	0	4	0	1	0	34	
Low %	29.4	38.2	8.8	5.9	2.9	0.0	11.8	0.0	2.9	0.0		
Std %	11.4	61.9	15.8	18.2	16.7	0.0	80.0	0.0	20.0	0.0		20.9%
FR	57	3	13	5	4	3	0	3	3	0	91	
Low %	62.6	3.3	14.3	5.5	4.4	3.3	0.0	3.3	3.3	0.0		
Std %	64.8	14.3	68.4	45.5	66.7	75.0	0.0	100.0	0.0	0.0		5.0%
ITAL	21	5	3	4	1	1	1	0	1	1	38	
Low %	55.3	13.2	7.9	10.5	2.6	2.6	2.6	0.0	2.6	2.0		
Std %	23.9	23.8	15.3	36.4	16.7	25.0	20.0	0.0	0.0	100.0		50.0%
COLUMBIAN SPANISH	88	21	19	11	6	4	5	3	5	1	163	163
Low %	54.0	12.9	11.7	6.7	3.7	2.5	3.1	1.0	3.1	.61		
Std %												100.0%

*L = general language work (spelling & grammar); R = reading, S = speaking, W = writing; + = other (subsumes 10 categories)

Tables LA, B, and C and IIA, B and C that the schools we have been studying tend to pursue a traditional reading/printing stress in the early grades. This stress may be more apparent than real. As ethnographers interested in literacy acquisition, we may merely have been more attentive to reading "occurrences" than to speaking "occurrences." On the other hand, while there may be some validity to the above cautionary note, it would not at all explain the paucity of writing related "occurrences." Writing is obviously part of literacy and a traditional area of school responsibility as well. Therefore, although we may, perhaps, doubt that speaking "occurrences" were as rare as our records indicate, the emphasis on reading relative to writing is probably a valid reflection of how our four schools address biliteracy acquisition in the grades under study. The fact that this hierarchy reoccurs in non-graded "occurrences," Table IIC(2), reinforces our conviction that it is, indeed, a reality in the contexts we have studied.

5.0 Decoding Strategies

Given the above-noted emphasis on reading, decoding strategies must necessarily loom large in any examination of the pedagogical dimensions of biliteracy acquisition. All in all, we are concerned whether ethnopedagogies exist leading each of our schools in a different direction (to adopt different methods) in the teaching of reading. Their emphases with respect to decoding strategies becomes one area in which we can try to find out whether ethnopedagogies exist, i.e. whether the schools are markedly different in their approaches

to teaching reading or, conversely, whether they are more pedagogically alike than pedagogically discrepant.

5.1 Table IIIA reveals that, in general, the differences across languages are markedly smaller than the similarities. Regardless of the medium involved (English, EMT or both), the synthetic approach (b) is implemented more frequently than the analytic one (a), and the analytic approach, in turn, is implemented more frequently than the syllabary approach (c). The major exception to the above progression occurs in EMT medium "occurrences" where sentence reading is more commonly encountered than the analytic approach.

5.2 Table III permits us to note another major exception to the $b > a > c$ (synthetic > analytic > syllabaries) progression, namely: in the Hebrew school. This school reveals a very clear preponderance of "occurrences" of analytic decoding strategies. Further analysis (Table IIIB[2]) indicates that this preponderance is attributable to English instruction in part and to instruction in which both languages are employed (contrastively?) as media. However, even in Hebrew, instruction, the level of analytic decoding is far higher than it is for decoding in any medium at any other school. Thus we must conclude that at the Hebrew school there is a systemic preference for analytic (whole word) decoding. This is really quite a startling finding since the traditional Jewish pedagogic approach was synthetic/syllabary with a vengeance, due both to the non-vernacular nature of the language and the absence of vowel letters in the writing system. Perhaps an ethnopedagogic reaction against the traditional system has

TABLE IIIA: STRATEGIES FOR LEARNING TO DECODE/SENTENCE READING* BY LANGUAGE

Language	a	b	c	2	a,b	b,c	+	Total %
SPANISH	21	56	1	17	5	4	7	111
Row %	18.9	50.5	.9	15.3	4.5	3.6	6.3	
Col %	62.9	51.8	10.2	32.7	17	22.2	47.2	42.5%
ENGLISH	17	39	8	24	4	6	8	106
Row %	16.0	36.8	7.5	22.6	3.8	5.7	7.5	
Col %	34.7	35.8	80.0	46.2	33.3	50.0	47.1	40.6%
YIDDISH	11	14	1	11	3	2	2	44
Row %	25.0	31.8	2.3	25.0	6.8	4.5	4.5	
Col %	22.4	12.8	10.0	21.2	25.0	16.7	11.3	16.9%
COUNTRY TOTAL	49	109	10	52	12	12	17	261
Row %	18.8	41.8	3.8	19.9	4.6	4.6	6.5	100.0%

TABLE IIIB: STRATEGIES FOR LEARNING TO DECODE/SENTENCE READING BY SCHOOL

School	a	b	c	2	a,b	b,c	+	Total %
ARGENTINE	10	22	4	7	5	3	6	57
Row %	17.5	38.6	7.0	12.3	8.8	5.3	10.5	
Col %	20.4	20.2	40.0	13.5	41.7	25.0	35.3	21.8%
NEW YORK	11	40	4	25	3	3	2	88
Row %	12.5	45.5	4.5	28.4	3.4	3.4	2.3	
Col %	22.4	36.7	40.0	48.1	25.0	25.0	11.8	33.7%
HAWAII	20	16	0	12	2	1	5	56
Row %	35.7	28.6	0.0	21.4	3.6	1.8	8.9	
Col %	40.8	14.7	0.0	23.1	16.7	8.3	29.4	21.5%
PERU	8	31	2	8	2	5	4	60
Row %	13.3	51.7	3.3	13.3	3.3	8.3	6.7	
Col %	16.3	28.4	20.0	15.4	16.7	41.7	23.5	23.0%
COUNTRY TOTAL	49	109	10	52	12	12	17	261
Row %	18.8	41.8	3.8	19.9	4.6	4.6	6.5	100.0%

TABLE IIIB (2): HEBREW SCHOOL STRATEGIES FOR LEARNING TO DECODE/SENTENCE READING BY LANGUAGE

Language	a	b	c	2	a,b	b,c	+	Total %
SPANISH	5	3	0	5	0	1	3	17
Row %	29.4	17.6	0.0	29.4	0.0	5.9	17.6	
Col %	25.0	18.8	0.0	41.7	0.0	100.0	60.0	30.4%
ENGLISH	10	11	0	3	1	0	1	26
Row %	38.5	42.3	0.0	11.5	3.8	0.0	3.8	
Col %	50.0	68.3	0.0	25.0	50.0	0.0	20.0	46.4%
YIDDISH	5	2	0	4	1	0	1	13
Row %	38.5	15.4	0.0	30.8	7.7	0.0	7.7	
Col %	25.0	12.5	0.0	33.3	50.0	0.0	20.0	23.2%
COUNTRY TOTAL	20	16	0	12	2	1	5	56
Row %	35.7	28.6	0.0	21.4	3.6	1.8	8.9	100.0%

TABLE IIIC: STRATEGIES FOR LEARNING TO DECODE/SENTENCE READING* BY LANGUAGE

Grade	a	b	c	2	a,b	b,c	+	Total %
M/E	14	31	3	1	3	4	2	58
Row %	24.1	53.4	5.2	1.7	5.2	6.9	3.4	
Col %	28.6	28.4	30.0	1.9	25.0	33.3	11.8	22.2%
L	32	66	4	31	7	6	8	154
Row %	20.8	42.9	2.6	20.1	4.5	3.9	5.2	
Col %	65.3	60.6	40.0	59.6	58.3	50.0	47.1	59.0%
Z	2	6	3	18	0	0	6	35
Row %	5.7	17.1	8.6	51.4	0.0	0.0	17.1	
Col %	4.1	5.5	30.0	34.6	0.0	0.0	35.3	13.4%
E	0	1	0	1	0	0	1	3
Row %	0.0	33.3	0.0	33.3	0.0	0.0	33.3	
Col %	0.0	.92	0.0	1.9	0.0	0.0	5.9	1.1%
SPANISH GRADE	1	5	0	1	2	2	0	11
Row %	9.1	45.4	0.0	9.1	18.2	18.2	0.0	
Col %	2.0	4.6	0.0	1.9	16.7	16.7	0.0	4.2%
COUNTRY TOTAL	49	109	10	52	12	12	17	261
Row %	18.8	41.8	3.8	19.9	4.6	4.6	6.5	100.0%

*Strategies for learning to decode: a = analytic; b = synthetic; c = syllabaries. 2 = sentence reading; + = other (subsumes 0 categories)

transpired in this very modern American Hebrew school, leading it to abandon the synthetic approach "with a vengeance" in favor of the analytic one.

5.3 Finally, Talbe IIIC reveals that the usually encountered preponderance of synthetic over other decoding strategies (with the exceptions noted above) is primarily implemented in nursery/kindergarten, first grade and ungraded contexts. In the second and third grades, on the other hand, sentence reading becomes a very important strategy. Indeed, sentence reading is clearly a grade related phenomenon, rising consistently from grade to grade, from nursery/kindergarten, through to second grade, and correspondingly both the synthetic and analytic strategies continue to fall from grade to grade. There does not seem to be a transition grade during which analytic approaches are more common than synthetic ones before sentence reading becomes established. Rather, synthetic approaches remain consistently more common than analytic ones even as sentence reading approaches build up in frequency.

All in all, there is some evidence for ethnopedagogies. With the possible exception of the Hebrew school (in which analytic decoding seems to prevail or to be consistently more common than elsewhere), the synthetic ("phonetic") method is widely stressed in the early grades. However, this stress on synthetic decoding could be either an American influenced "back to basics" emphasis, on the one hand, or, on the other hand, a continuation of traditional, classical, Old World pedagogic emphases which tend to be synthetic rather than analytic. It is impossible at this stage to tell whether ethnopedagogies are

definitely revealed by this stress on synthetic decoding. This is definitely an area which merits inquiry, both with respect to English as well as with respect to EMT literacy acquisition.

6.0 Class, Group or Individual Instruction

Another possible dimension of ethnopedagogic practices is the number of students that constitute a unit of instruction.

"Traditionally" the entire class has been the usual unit. In more "modern" practice, however, small groups and even individual students are given as much attention as possible. Our next set of tables helps us examine this dimension in the four minority ethnolinguistic schools that we have been investigating.

6.1 From Table IVA it is evident that "complete class" instruction is the most common practice regardless of the medium of instruction. This is particularly true whenever English is utilized, whether as a medium or as a co-medium of instruction. However, although this finding is not inconsistent with the existence of ethnopedagogies, it would be premature to conclude that such really obtain. It may be, for example, that the pupil populations are generally more homogeneous with respect to English mastery than they are with respect to EMT mastery. If that, indeed, were the case, then the overall preference for using the class as the unit of instruction (derived purely from cost considerations) might be modified or mitigated to attend to the more disparate mastery subgroups that pertain to EMT instruction. Perhaps it would be more judicious to withhold any conclusions in this connection until we see how the class, group or individual basis

TABLE IVA. UNIT OF INSTRUCTION (CLASS, GROUP OR INDIVIDUAL)* BY LANGUAGE

Language	a	b	c	a,c	b,c	+	Total
ENGLISH	67	22	16	8	7	2	122
Low %	54.9	18.0	13.1	6.6	5.7	1.6	
Col %	35.8	23.4	37.2	21.6	43.8	28.6	31.8%
SPANISH	76	64	21	18	7	4	190
Low %	40.0	33.7	11.1	9.5	3.7	2.1	
Col %	40.6	68.4	48.3	43.6	3.8	37.1	49.5%
W/IE	44	8	6	11	2	1	72
Low %	61.1	11.1	8.3	15.3	2.8	1.4	
Col %	23.5	8.5	14.0	29.7	12.5	14.3	13.3%
COURSE TOTALS	187	94	43	37	16	7	384
Low %	48.7	24.5	11.2	9.6	4.2	1.8	100.0%

TABLE IVE UNIT OF INSTRUCTION (CLASS, GROUP OR INDIVIDUAL) BY SCHOOL

School	a	b	c	a,c	b,c	+	Total
ARIZONA	17	16	13	21	5	1	73
Low %	23.3	21.9	17.8	28.8	6.8	1.4	
Col %	9.1	17.0	30.2	56.8	31.3	14.3	19.0%
NEW YORK	112	3	9	6	0	0	130
Low %	86.2	2.3	6.9	4.6	0.0	0.0	
Col %	59.9	3.2	21.0	16.2	0.0	0.0	33.9%
TEXAS	47	28	13	6	6	3	103
Low %	45.6	27.2	12.6	5.8	5.8	2.9	
Col %	25.1	29.8	30.2	16.2	37.5	42.9	26.3%
FLORIDA	11	47	8	4	5	3	78
Low %	14.1	60.3	10.3	5.1	6.4	3.8	
Col %	5.9	50.0	18.6	10.8	31.3	42.9	20.3%
COURSE TOTALS	187	94	43	37	16	7	384
Low %	48.7	24.5	11.2	9.6	4.2	1.8	100.0%

TABLE IVB (2): FRENCH SCHOOL: UNITY INSTRUCTION (CLASS, GROUP OR INDIVIDUAL) BY LANGUAGE

Language	a	b	c	a,c	b,c	+	Total
ENGLISH	4	14	3	2	1	1	25
Low %	16.0	56.0	12.0	8.0	4.0	4.0	
Col %	36.4	29.8	37.5	50.0	20.0	33.3	32.1%
SPANISH	3	27	3	1	4	2	40
Low %	7.5	67.5	7.5	2.5	10.0	5.0	
Col %	27.3	57.4	37.5	25.0	80.0	66.7	51.3%
W/IE	4	6	2	1	0	0	13
Low %	30.8	46.2	15.4	7.7	0.0	0.0	
Col %	36.4	12.8	25.0	25.0	0.0	0.0	16.3%
COURSE TOTALS	11	47	8	4	5	3	78
Low %	14.1	60.3	10.3	5.1	6.4	3.8	100.0%

TABLE IVc: UNIT OF INSTRUCTION (CLASS, GROUP OR INDIVIDUAL) BY GRADE

Grade	a	b	c	a,c	b,c	+	Total
N/A	36	22	5	1	3	1	68
Low %	52.9	32.4	7.4	1.5	4.4	1.5	
Col %	19.3	23.4	11.6	2.7	18.8	14.3	17.7%
I	111	58	19	21	11	5	225
Low %	49.3	25.8	8.4	9.3	4.9	2.2	
Col %	59.4	61.7	44.2	55.8	68.8	71.4	58.6%
II	34	7	7	14	1	1	64
Low %	53.1	10.9	10.9	21.9	1.6	1.6	
Col %	18.2	7.4	16.3	37.8	6.3	14.3	16.7%
III	6	2	2	1	0	0	11
Low %	54.5	18.2	18.2	9.1	0.0	0.0	
Col %	3.2	2.1	4.7	2.7	0.0	0.0	2.9%
NON GRADE	0	5	10	0	1	0	16
Low %	0.0	31.3	62.5	0.0	6.3	0.0	
Col %	0.0	5.3	23.3	0.0	6.3	0.0	4.2%
COURSE TOTALS	187	94	43	37	16	7	384
Low %	48.7	24.5	11.2	9.6	4.2	1.8	100.0%

* Unit of instruction: a = complete class; b = small group; c = individual, + = other (subsumes 3 categories)

of instruction related to the other two basic variables we have been examining: school and grade.

6.2 As far as school is concerned, the predominant unit of instruction is the entire class only in the Greek and Hebrew schools. The Armenian school reveals only a mild preference for the class as the unit of instruction (and also reveals more frequent individualized instruction than any other school). The French school, however, clearly reveals a preference for small group work and is quite unique in this connection. Indeed, as Table IVB(2) reveals, this preference of the French school is constant regardless of language of instruction and is, if anything, even greater in French medium instruction than in English medium instruction. The French school, it must be remembered, is our numerically smallest school insofar as average class size is concerned. Thus, from a purely practical point of view, it could more easily organize instruction on a complete class basis. Its preference for the small group approach is either an ethnopedagogic heritage or simply a resultant of the interaction between its particular financial, philosophical and demographic characteristics.

6.3 The overall preference for utilizing the entire class as the unit of instruction is manifest in every grade. In ungraded occurrences, however, the individual becomes the unit, but this is so almost by definition and, therefore, of lesser interest than the fact that the individual is increasingly the unit of instruction (although always less common than either of the other two possible units) as grade increases. This may be class-size related again and prompts the overall observation that the smaller the class size the more likely that units of instruction

other than the entire class will be implemented (Table IVC).

All in all, some of our evidence in connection with unit of instruction is not inconsistent with the ethnopedagogies hypothesis. This hypothesis, therefore, deserves further investigation, although it does seem that other, more practical or objective considerations go quite far in explaining our findings.

7.0 Type of Reading Materials

A standard pedagogic issue in the reading field pertains to the types of reading materials employed and the changing balance between them as the reading acquisition process proceeds. Let us now look into this issue in the context of the four schools we are investigating.

7.1 There is no question that basal readers and teacher prepared materials are the two predominant types of literacy related materials in our schools with the latter predominating over the former in those contexts in which the EMT is involved. However, as Table VA reveals, in English medium contexts, basal readers predominate by a huge margin. To some extent this difference may be attributable to the greater availability of basal texts for English but, in addition, all schools are faced by the far from perfect suitability of whatever basal texts there are in the EMTs for American born children who do not have a native grasp of the EMT. Furthermore, the greater variability in levels of student mastery of the EMT within any particular class (noted above as a factor leading to more frequent small group instruction in the EMT) also results in the unsuitability of any one basal text and the need to supplement such texts by teacher-made materials.

TABLE VA: TYPES OF READING MATERIAL* BY LANGUAGE

Language	a	b	c	d	e	+	Total
ARABIC	7	81	5	10	10	23	136
Low T	5.1	59.6	3.7	7.4	7.4	16.9	
Col T	77.8	58.7	55.6	8.3	52.6	53.5	40.2%
HEBREW	1	41	2	83	0	15	148
Low T	.68	27.7	1.4	56.1	4.1	10.1	
Col T	11.1	29.7	22.2	69.2	31.0	34.9	43.3%
RUSSIAN	1	16	2	27	3	5	54
Low T	1.9	29.6	3.7	50.0	5.6	9.3	
Col T	11.1	11.6	22.2	22.5	15.8	11.6	16.0%
COLLECTIVE TOTAL	9	138	9	120	19	43	338
Low T	2.7	40.8	2.7	35.5	5.6	12.7	100.0%

TABLE VB: TYPES OF READING MATERIAL - APPROACHES* BY SCHOOL

School	a	b	c	d	e	+	Total
ARABIAN	3	35	4	9	0	4	55
Low T	5.5	63.6	7.3	16.4	0.0	7.3	
Col T	33.3	25.4	44.4	7.5	0.0	9.3	16.3%
HEBREW	3	84	2	22	0	9	120
Low T	2.5	70.0	1.7	18.3	0.0	7.5	
Col T	33.3	61.0	22.2	18.3	0.0	21.0	35.5%
RUSSIAN	1	9	1	47	8	20	86
Low T	1.2	10.5	1.2	54.7	9.3	23.3	
Col T	11.1	6.5	11.1	39.2	42.1	46.5	25.4%
FRANCE	2	10	2	42	11	10	77
Low T	2.6	13.0	2.6	54.5	14.3	13.0	
Col T	22.2	7.2	22.2	35.0	57.9	23.3	22.8%
COLLECTIVE TOTAL	9	138	9	120	19	43	338
Low T	2.7	40.8	2.7	35.5	5.6	12.7	100.0%

TABLE VB(2): GREEK SCHOOL: TYPES OF READING MATERIAL BY LANGUAGE

Language	a	b	c	d	e	+	Total
ARABIC	3	50	1	3	0	5	62
Low T	4.8	80.6	1.6	4.8	0.0	8.1	
Col T	100.0	59.5	50.0	13.6	0.0	55.6	51.7%
HEBREW	0	24	0	13	0	2	39
Low T	0.0	61.5	0.0	33.3	0.0	5.1	
Col T	0.0	28.6	0.0	59.1	0.0	22.2	32.5%
RUSSIAN	0	10	1	6	0	2	19
Low T	0.0	52.6	5.3	31.6	0.0	10.5	
Col T	0.0	11.9	50.0	27.3	0.0	22.2	15.8%
COLLECTIVE TOTAL	3	84	2	22	0	9	120
Low T	2.5	70.0	1.7	18.3	0.0	7.5	100.0%

TABLE Vc: TYPES OF READING MATERIAL BY GRADE

Grade	a	b	c	d	e	+	Total
B/K	2	12	0	34	6	9	63
Low T	3.2	19.0	0.0	54.0	9.5	14.3	
Col T	22.2	3.7	0.0	28.3	31.6	20.9	18.6%
I	6	90	5	70	7	23	201
Low T	3.0	44.8	2.5	34.8	3.5	11.4	
Col T	66.7	65.2	55.6	58.3	36.8	53.5	59.5%
II	1	30	3	11	2	2	49
Low T	2.0	61.2	6.1	22.4	4.1	4.1	
Col T	11.1	21.7	33.3	9.2	10.5	4.7	14.5%
III	0	1	1	3	2	0	7
Low T	0.0	14.3	14.3	42.9	28.6	0.0	
Col T	0.0	.72	11.1	2.5	10.5	0.0	2.1%
FOUR GRADE	0	5	0	2	2	9	18
Low T	0.0	27.8	0.0	11.1	11.1	50.0	
Col T	0.0	3.6	0.0	1.7	10.5	20.9	5.3%
COLLECTIVE TOTAL	9	138	9	120	19	43	338
Low T	2.7	40.8	2.7	35.5	5.6	12.7	100.0%

*Reading material: a = experiential; b = basal reading; c = individual; d = teacher-made material; e = other published material; + = other (subsumes 13 categories)

7.2 Indeed, in the Hebrew and French schools, where very minor proportions of the children are EMT speaking, teacher-made materials are used vastly more than basal readers (Table VB). On the other hand, in the Armenian and Greek schools, where the bulk of the pupils are "at home" both in English and in the EMT by the time they arrive in school, basal readers predominate just as clearly. Nevertheless, even in these schools there is a noticeably greater tendency to use basal readers for English reading instruction than for EMT reading instruction (Table VB[2]).

7.3 The relative reliance on basal readers vs. teacher-made materials is also grade related as Table VC clearly reveals. Basal readers are particularly 1st and 2nd grade related whereas teacher-made materials obviously predominate in the nursery/kindergarten setting and the few instances where reading instruction is still required in the 3rd grade. Interestingly enough, out of class reading "occurrences" also tended to involve basal texts more than teacher-made materials.

8.0 Oral Reading

At the early stages of reading instruction/reading acquisition, oral reading is much stressed. Indeed, in contrast to reading in adult life (and in out-of-school life more generally), school-imbedded reading is much more likely to be oral than silent. This observation seems to be fully confirmed by our data.

8.1 Silent reading accounts for a very minor proportion of all overt reading "occurrences" (Table VIA), and what little of it there is occurs almost entirely in an English medium context. As far as

TABLE VIA: ORAL READING* BY LANGUAGE

Language	a	b	c	b,c	4	5	4c	+	n	Row Total %
ENGLISH	0	28	20	8	18	7	3	7	91	
Row %	0.0	30.8	22.0	8.8	19.8	7.7	3.3	7.7		
Col %	0.0	45.2	34.5	34.8	35.3	87.5	25.0	36.8		38.6%
HEBREW	1	22	27	8	24	1	8	9	100	
Row %	1.0	22.0	27.0	8.0	24.0	1.0	8.0	9.0		
Col %	33.3	25.5	46.6	24.8	47.1	12.5	66.7	47.7		42.2%
BOTH	2	12	11	7	9	0	1	3	45	
Row %	4.4	26.7	24.4	15.6	20.0	0.0	2.2	6.7		
Col %	66.7	19.4	19.0	30.4	17.6	0.0	8.3	15.8		19.1%
COLUMBIAN TOTAL	3	62	58	23	51	8	12	19	236	
Row %	1.3	26.3	24.6	9.7	21.6	3.4	5.1	8.1		100.0%

TABLE VII: ORAL READING* BY SCHOOL

School	a	b	c	b,c	4	5	4c	+	n	Row Total %
ARMENIAN	0	5	14	4	5	4	10	8	50	
Row %	0.0	10.0	28.0	8.0	10.0	8.0	20.0	16.0		
Col %	0.0	8.1	24.1	17.4	9.8	50.0	83.3	42.1		21.2%
Row %	3	39	13	8	10	0	0	7	80	
Row %	3.8	48.9	16.3	10.0	12.5	0.0	0.0	8.8		
Col %	100.0	62.9	22.4	34.8	19.6	0.0	0.0	36.8		33.9%
HEBREW	0	13	12	7	14	4	0	3	53	
Row %	0.0	24.5	22.6	13.2	26.4	7.5	0.0	5.7		
Col %	0.0	21.0	20.7	30.4	27.4	50.0	0.0	15.8		22.4%
FRENCH	0	5	19	4	22	0	2	1	53	
Row %	0.0	9.4	35.8	7.5	41.5	0.0	3.8	1.9		
Col %	0.0	8.1	32.8	17.4	43.1	0.0	16.7	5.3		22.4%
COLUMBIAN TOTAL	3	62	58	23	51	8	12	19	236	
Row %	1.3	26.3	24.6	9.7	21.6	3.4	5.1	8.1		100.0%

TABLE VIII: ORAL READING BY GRADE

Grade	a	b	c	b,c	4	5	4c	+	n	Row Total %
N/K	0	18	10	4	13	0	0	1	46	
Row %	0.0	39.1	21.7	8.7	28.3	0.0	0.0	2.2		
Col %	0.0	29.0	17.2	17.4	25.5	0.0	0.0	5.3		19.5%
I	2	39	33	17	30	7	10	14	152	
Row %	1.3	25.7	21.7	11.2	19.7	4.6	6.6	9.2		
Col %	66.7	62.9	56.9	73.9	58.8	87.5	83.3	73.7		64.4%
II	1	5	11	2	5	0	2	3	29	
Row %	3.4	17.2	37.9	6.9	17.2	0.0	6.9	10.3		
Col %	33.3	8.1	19.0	8.7	9.8	0.0	16.7	15.8		12.3%
III	0	0	1	0	0	1	0	1	3	
Row %	0.0	0.0	33.3	0.0	0.0	33.3	0.0	33.3		
Col %	0.0	0.0	1.7	0.0	0.0	12.5	0.0	5.3		1.3%
NON GRADE	0	0	3	0	3	0	0	0	6	
Row %	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0		
Col %	0.0	0.0	5.2	0.0	5.9	0.0	0.0	0.0		2.5%
COLUMBIAN TOTAL	3	62	58	23	51	8	12	19	236	
Row %	1.3	26.3	24.6	9.7	21.6	3.4	5.1	8.1		100.0%

*Oral reading: a = round robin; b = choral; c = individual, 4 = oral reading in general, 5 = silent reading; + = other (subsumes 9 categories)

oral reading is concerned, it is divided rather equally between choral reading, individual reading (i.e., individuals being called upon to read) and general oral reading in the context of other subjects.

8.2 Choral reading is a particularly frequent "occurrence" in the Greek school (which also has the largest classes of any of our schools). Individual reading is far more commonly encountered in the French school than elsewhere (this school also has the smallest classes of any of our schools). Thus, once again, although there may be some evidence favoring ethnopedagogy, it is really inconclusive given the more objective circumstances that can be appealed to as explanatory considerations (Table VIB).

8.3 Both choral and general oral reading decline as grade level increases (Table VIC). On the other hand, individual oral reading is demonstrably higher in the higher grades (and in ungraded settings) than in the lower ones. Both of these trends are explainable on class size grounds and, therefore, tend to provide scant support for an ethnopedagogic hypothesis.

9.0 Where Literacy is Learned: Home vs. School (The Sociofunctional Dimension)

Both via direct observation as well as via indirect conversation and direct questioning, we have sought to determine the out-of-school contribution to biliteracy acquisition. Ultimately literacy must serve societal-interactive functions. It is, therefore, desirable to determine the extent to which society anticipates the ultimately societal function of literacy by participating in and providing for its incul-

cation even outside of school. Such societal participation would also tend to contribute to ethnopedagogies within the school per se.

9.1 Our data reveal very little evidence of out-of-school co-participation in the biliteracy acquisition process (Table VIIA). All in all, 83% of all relevant "occurrences" are school-based with the corresponding proportion being even higher (91%) for English and lowest (78%) for EMT literacy acquisition. Although school-home and school-community co-participation are rather rare "occurrences," it is interesting to note that to the extent that they do obtain, they are far more likely to be EMT related than English related. Thus, while home and community are, overall, relatively weak literacy imparting agencies in our four schools, whatever contribution they do make to biliteracy is connected with the EMT rather than with English. This may be a function of generational differences. The parents of a substantial number of our pupils are often not native English speakers whereas they are, more frequently, native EMT speakers. Thus, they may be better prepared to assist their children in this connection and, at any rate, the fact that they selected to send their children to an EMT school may be indicative of a distinctive (even though not an overbearing) parental interest in their offspring's progress in this connection.

9.2 and 9.3 So huge is the dependency on school for literacy acquisition that there is almost no room for school or grade variation with respect to this variable. Nevertheless, it is interesting to find that whatever school-home interaction there is in this connection occurs primarily

TABLE VIIA: WHERE LITERACY IS LEARNED* BY LANGUAGE

Language	n	S %	H %	C %	S,H %	S,C %	H,C %	+	Row Total %
ENGLISH	276		2	0	17	4	2	2	303
Row %		91.1	.66	0.0	5.6	1.3	.66	.66	
Col %		33.5	11.8	0.0	20.0	15.4	18.2	20.0	30.6%
HEB	370		12	14	45	20	9	5	475
Row %		77.9	2.5	2.9	9.5	4.2	1.9	1.1	
Col %		45.0	70.6	77.8	52.9	76.9	81.8	50.0	48.0%
BOTH	177		3	4	23	2	0	3	212
Row %		83.5	1.4	1.9	10.8	.94	0.0	1.4	
Col %		21.5	17.6	22.2	27.1	7.7	0.0	30.0	21.4%
COLUMN TOTAL	823		17	18	85	26	11	10	990
%		83.1	1.7	1.8	8.6	2.6	1.1	1.0	100.0%

TABLE VIIB: WHERE LITERACY IS LEARNED BY SCHOOL

School	n	S %	H %	C %	S,H %	S,C %	H,C %	+	Row Total %
ARMENIAN	161		5	14	5	4	3	3	195
Row %		82.6	2.6	7.2	2.6	2.1	1.5	1.5	
Col %		19.6	29.4	77.8	5.9	15.4	27.3	30.0	19.7%
Row %	237		7	3	26	16	8	0	297
Row %		79.8	2.4	1.0	8.8	5.4	2.7	0.0	
Col %		28.8	41.2	16.7	30.6	61.5	72.7	0.0	30.0%
HEBREW	255		4	0	35	3	0	4	301
Row %		84.7	1.3	0.0	11.6	1.0	0.0	1.3	
Col %		31.0	23.5	0.0	41.2	11.5	0.0	40.0	30.4%
FRENCH	170		1	1	19	3	0	3	197
Row %		86.3	.51	.51	9.6	1.5	0.0	1.5	
Col %		20.7	5.9	5.6	22.4	11.5	0.0	30.0	19.9%
COLUMN TOTAL	823		17	18	85	26	11	10	990
%		83.1	1.7	1.8	8.6	2.6	1.1	1.0	100.0%

TABLE VIIC: WHERE LITERACY IS LEARNED BY GRADE

Grade	n	S %	H %	C %	S,H %	S,C %	H,C %	+	Row Total %
N/K	156		4	0	17	1	0	0	178
Row %		87.6	2.2	0.0	9.6	.56	0.0	0.0	
Col %		19.0	23.5	0.0	20.0	3.8	0.0	0.0	18.0%
I	404		5	1	20	4	0	2	436
Row %		92.7	1.1	.23	4.6	.92		.46	
Col %		49.1	29.4	5.6	23.5	15.4	0.0	20.0	44.0%
II	105		1	0	9	1	1	0	117
Row %		89.7	.85	0.0	7.7	.85	.85	0.0	
Col %		12.8	5.9	0.0	10.6	3.8	9.1	0.0	11.8%
III	26		0	0	1	1	0	1	29
Row %		89.7	0.0	0.0	3.4	3.4	0.0	3.4	
Col %		3.2	0.0	0.0	1.2	3.8	0.0	10.0	2.9%
NOI GRADE	132		7	17	38	19	10	7	230
Row %		57.4	3.0	7.4	16.5	8.3	4.3	3.0	
Col %		16.0	41.2	94.4	44.7	73.1	90.9	70.0	23.2%
COLUMN TOTAL	823		17	18	85	26	11	10	990
%		83.1	1.7	1.8	8.6	2.6	1.1	1.0	100.0%

*Where literacy is learned: S = School; H = home; C = community; + = other (subsumes 4 categories)

in the Hebrew school (Table VIIB) whereas community involvement (regularly lower even than home involvement) is highest in the Armenian context. With respect to grade, there is a very slight tendency for both home and community to make whatever contributions they are going to make in the earlier grades rather than in the later ones (Table VIIC).

All in all, there is little evidence that the ethnic communities to which our schools correspond are particularly active partners in the literacy acquisition process. In this respect, they have been fully "Americanized." The out-of-school sociofunctional role of literacy is that much weaker, both for English as well as for the EMTs. Strong out-of-school involvement in biliteracy acquisition is predictive of strong out-of-school functionality for literacy in the life pattern of a particular speech community. The absence of the one sounds an ominous note with respect to the absence of the other.

10. Topical Emphases (Ethnic/Non-Ethnic) of Teaching/Learning Materials

10.1 From a supporting set of tables not reproduced in this report, it is clear that most literacy relevant teaching/learning materials in the four schools we have studied are classroom and student focused (as distinct from adult or community focused). Indeed, this appears to be true from grade to grade and regardless of language of instruction. A related and perhaps more interesting issue deals with the relative emphases on ethnic vs. non-ethnic topics. In this connection, our data reveal a decisive preponderance of non-ethnic topics regardless of medium of instruction but particularly when English is the medium (Table VIIIA). While ethnic topics do receive considerably more

TABLE VIIIA: TOPICAL EMPHASIS: ETHNIC/NON-ETHNIC* BY LANGUAGE

Language	E ₅	E _{2,3}	E ₃	NE ₅	B _{3,5}	+	Total
ENGLISH	0	1	3	88	1	18	111
Row %	0.0	.90	2.7	79.3	.90	16.2	
Col %	0.0	14.3	4.7	51.5	20.9	31.6	35.8%
WET	5	5	47	55	4	28	144
Row %	3.5	3.5	32.6	38.2	2.8	19.4	
Col %	83.3	71.4	73.4	32.2	80.0	49.1	46.5%
BOTH	1	1	14	28	0	11	55
Row %	1.8	1.8	25.5	50.9	0.0	20.0	
Col %	16.7	14.3	21.9	16.4	0.0	19.3	17.7%
COLUMBIA TOTAL	6	7	64	171	5	57	310
%	1.9	2.3	20.6	55.2	1.6	18.4	100.0%

TABLE VIIIB: TOPICAL EMPHASIS: ETHNIC/NON-ETHNIC BY SCHOOL

School	E ₅	E _{2,3}	E ₃	NE ₅	B _{3,5}	+	Total
ARMENIAN	2	2	11	40	0	20	75
Row %	2.7	2.7	14.7	53.3	0.0	26.7	
Col %	33.3	28.6	17.2	23.4	0.0	35.1	24.4%
NEW	1	1	5	74	1	15	97
Row %	1.0	1.0	5.2	76.3	1.0	15.5	
Col %	16.7	14.3	7.8	43.3	20.0	26.3	31.3%
HEBREW	3	2	48	18	4	18	93
Row %	3.2	2.2	51.6	19.4	4.3	19.4	
Col %	50.0	28.6	75.0	10.5	80.0	31.6	30.0%
FRENCH	0	2	0	39	0	4	45
Row %	0.0	4.4	0.0	86.7	0.0	8.9	
Col %	0.0	28.6	0.0	22.8	0.0	7.0	14.5%
COLUMBIA TOTAL	6	7	64	171	5	57	310
%	1.9	2.3	20.6	55.2	1.6	18.4	100.0%

TABLE VIIC: TOPICAL EMPHASIS: ETHNIC/NON-ETHNIC BY GRADE

Grade	E ₅	E _{2,3}	E ₃	NE ₅	B _{3,5}	+	Total
H/E	1	1	5	52	1	6	66
Row %	1.5	1.5	7.6	78.8	1.5	9.1	
Col %	16.7	14.3	7.8	30.4	20.0	10.5	21.3%
1	1	3	40	89	2	22	157
Row %	.64	1.9	25.5	56.7	1.3	14.0	
Col %	16.7	42.9	62.5	52.0	40.0	38.6	50.6%
2	1	0	6	25	1	9	42
Row %	2.4	0.0	14.3	59.5	2.4	21.4	
Col %	16.7	0.0	9.4	14.6	20.0	15.8	13.5%
3	0	0	4	2	0	3	9
Row %	0.0	0.0	44.4	22.2	0.0	33.3	
Col %	0.0	0.0	6.3	1.2	0.0	5.3	2.9%
NON GRADE	3	3	9	3	1	17	36
Row %	8.3	8.3	25.0	8.3	2.8	47.2	
Col %	50.0	42.9	14.1	1.8	20.0	29.8	11.6%
COLUMBIA TOTAL	6	7	64	171	5	57	310
%	1.9	2.3	20.6	55.2	1.6	18.4	100.0%

*Topical emphasis: E = ethnic; NE = non-ethnic, B = both
 2 = community; 3 = church; 5 = general; + = other (subsumes 24 categories)

attention when the EMTs are utilized as media, even then non-ethnic topics continue to show a slight edge. This topical distribution is indicative of the fact that ethnic schools discharge a joint role: they ethnicize in an American way and they Americanize in an ethnic way (Fishman, Gertner, Lowy and Milan 1982). In either case, their American role is not only substantial but often more substantial (more certain, pervasive and established) than their ethnic stress which is constantly being moderated and mediated by non-ethnic concerns.

10.2 Non-ethnic topical emphases are particularly strong in the French school (which actually has no ethnic community base in New York) and in the Greek school (Table VIIIB). The latter school is coping with an influx of new arrivals and may, therefore, be preparing them for American roles and interactions even in literacy related "occurrences" that utilize Greek as a medium. The Hebrew school, on the other hand, tends toward exactly the opposite orientation. It shows such a clear predominance for ethnic topics that many of its English language literacy related "occurrences" must be devoted to ethnic topics as well. Thus, ethnic schools seem to vary their ethnic/non-ethnic topical emphases depending on the needs, experiences and concerns of their sponsoring constituencies.

10.3 There is also a tendency for the proportion of non-ethnic topics to decrease as grade level increases (Table VIIIC). Perhaps schools start off with common American topics which all students recognize and react to acceptingly and then slowly introduce increased ethnic emphases in accord with the particular backgrounds and interests represented in their student bodies.

11.0 The Sociolinguistic Dimension: Dialect Differences

11.1 "Occurrences" of non-school dialect were exceedingly rare in the schools we visited. To the very minor degree that such occurrences were recognized, they were almost entirely associated with EMT instruction rather than with English medium instruction (Table IXA). This does not mean that non-school English is relatively unknown in these schools. Rather, it means that these schools do not correct non-school English (perhaps leaving it to the Anglo-environment to do so or, perhaps, accepting such English in the school as long as its distinctiveness is associated with the sponsoring ethnic community). EMT non-school dialect, on the other hand, rare though it may be, is more consciously corrected by the language guardians of the school.

11.2 The foregoing would seem to apply most particularly to the Greek, Armenian and French schools (Table LXB). In the Hebrew school, hardly any correction "occurrences" along these lines were noted, probably because modern Hebrew itself has not yet developed as much of a distance between regional or social class related school and non-school varieties as have the other languages studied.

11.3 All in all, non-school dialect tends to "occur" in terms of phonological discrepancies. However, as grade level increases, such discrepancies decrease and, finally, disappear entirely (Table IXC). The triumph of the school variety over the home variety is undoubtedly facilitated by the fact that many homes are not only weakly associated with EMT literacy but that they are only weakly associated with the EMT as a whole.

TABLE IXA: SOCIOLINGUISTIC ISSUES (NON-SCHOOL DIALECT)* BY LANGUAGE

- 28 -

Language	1	2	1,2	1,2,3	1,3	2	2,3	3	+	n	Row Total %
ARMENIAN	0	0	0	1	2	0	1	1	1	5	
Row %	0.0	0.0	0.0	20.0	40.0	0.0	20.0	20.0	20.0		10.6%
Col %	0.0	0.0	0.0	100.0	14.3	0.0	39.3	4.3			
GREEK	1	2	2	0	12	1	2	21		41	
Row %	2.4	4.9	4.9	0.0	29.3	2.4	4.9	51.2			87.0%
Col %	100.0	100.0	100.0	0.0	85.7	100.0	66.7	91.3			
BOTH	0	0	0	0	0	0	0	1		1	
Row %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0			2.1%
Col %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3			
COLUMBIAN TOTAL	1	2	2	1	14	1	3	23		47	100.0%
Row %	2.1	4.3	4.3	2.1	29.8	2.1	6.4	48.9			

TABLE IXB: SOCIOLINGUISTIC ISSUES (NON-SCHOOL DIALECT)* BY SCHOOL

School	1	2	1,2	1,2,3	1,3	2	2,3	3	+	n	Row Total %
ARMENIAN	0	0	1	0	0	1	1	10		13	
Row %	0.0	0.0	7.7	0.0	0.0	7.7	7.7	76.9			27.7%
Col %	0.0	0.0	50.0	0.0	0.0	100.0	33.3	43.5			
Greek	1	1	0	1	3	0	2	8		16	
Row %	6.3	6.3	0.0	6.3	18.8	0.0	12.5	50.0			34.0%
Col %	100.0	50.0	0.0	100.0	21.4	0.0	66.7	34.8			
HEBREW	0	0	0	0	3	0	0	2		5	
Row %	0.0	0.0	0.0	0.0	60.0	0.0	0.0	40.0			10.6%
Col %	0.0	0.0	0.0	0.0	21.4	0.0	0.0	8.7			
FRENCH	0	1	1	0	8	0	0	3		13	
Row %	0.0	7.7	7.7	0.0	61.5	0.0	0.0	23.1			27.7%
Col %	0.0	40.0	50.0	0.0	57.1	0.0	0.0	13.0			
COLUMBIAN TOTAL	1	2	2	1	14	1	3	23		47	100.0%
Row %	2.1	4.3	4.3	2.1	29.8	2.1	6.4	48.9			

TABLE IX C

Grade	1	2	1,2	1,2,3	1,3	2	2,3	3	+	n	Row Total %
W/K	0	0	1	0	2	0	0	3		6	
Row %	0.0	0.0	16.7	0.0	33.3	0.0	0.0	50.0			12.8%
Col %	0.0	0.0	50.0	0.0	14.3	0.0	0.0	13.0			
I	0	0	0	1	5	1	1	3		11	
Row %	0.0	0.0	0.0	9.1	45.5	9.1	9.1	27.3			23.4%
Col %	0.0	0.0	0.0	100.0	35.7	100.0	33.3	13.0			
II	0	0	0	0	1	0	1	2		4	
Row %	0.0	0.0	0.0	0.0	25.0	0.0	25.0	50.0			8.5%
Col %	0.0	0.0	0.0	0.0	7.1	0.0	33.3	8.7			
III	1	0	0	0	0	0	0	1		2	
Row %	50.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0			4.3%
Col %	100.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3			
NON GRADE	0	2	1	0	6	0	1	14		24	
Row %	0.0	8.3	4.2	0.0	25.0	0.0	4.2	58.3			51.1
Col %	0.0	100.0	50.0	0.0	42.9	0.0	33.3	61.0			
COLUMBIAN TOTAL	1	2	2	1	14	1	3	23		47	100.0%
Row %	2.1	4.3	4.3	2.1	29.8	2.1	6.4	48.9			

*Non-school dialect issues: 1 = vocabulary; 2 = phonology; 3 = grammar; + = other (subsumes 2 categories)

12.0 Cross-Language Contrasts

12.1 The small number of non-school dialect "occurrences" may also be due to a general lack of teacher sophistication or consciousness with respect to them. Relative to the other literacy related problems that teachers are concerned with, those that pertain to linguistic issues may be considered relatively recondite or even esoteric. Another indication that our teachers may simply be naive or unfocused with respect to linguistic issues is encountered in Tables XA, B and C. In this series, we note how rarely teachers are inclined to discuss the problems or progress of individuals or groups of pupils in contrastive terms. To the small degree that such problems are recognized (whether positively or negatively, i.e. as obtaining or as absent), they are more likely to be discussed in connection with phonology than in any other contrastive connection (Table XA).

12.2 Contrastive phonological issues (EMT-English), rarely mentioned though they be (even in terms of denying any such "occurrences"), are encountered primarily in the Hebrew and French schools (Table XB). Presumably we are dealing here with pupils who do not come to school with any home-based EMT phonological repertoire, and the school is immediately faced by several difficulties to be overcome if native or near native EMT phonology is to be approximated.

12.3 Any such concern, however, is soon abandoned. As grade level increases, any minor contrastive preoccupation that may originally obtain is steadily abandoned (Table XC). By grade three, virtually no contrastive teacher comments (whether positive or negative) are

TABLE XA: CONTRASTIVE LANGUAGE PROBLEMS* BY LANGUAGE

Language	yes			no			+	Total %
	lex %	gram %	phon %	lex %	gram %	phon %		
ENGLISH	2	3	2	0	0	6	2	15
Row %	13.3	20.0	13.3	0.0	0.0	40.0	13.3	
Col %	28.6	37.5	15.4	0.0	0.0	54.5	22.2	27.8%
INT	3	2	4	0	1	2	0	12
Row %	25.0	16.7	33.3	0.0	8.3	16.7	0.0	
Col %	42.9	25.0	30.8	0.0	50.0	18.2	0.0	22.2%
BOTH	2	3	7	4	1	3	7	27
Row %	7.4	11.1	25.9	14.8	3.7	11.1	25.9	
Col %	28.6	37.5	53.8	100.0	50.0	27.3	77.8	50.0%
COLUMN TOTAL	7	8	13	4	2	11	9	54
%	13.0	14.8	24.1	7.4	3.7	20.4	16.7	100.0%

TABLE XB: CONTRASTIVE LANGUAGE PROBLEMS BY SCHOOL

School	yes			no			+	Total %
	lex %	gram %	phon %	lex %	gram %	phon %		
ARMENIAN	3	3	2	1	1	1	1	12
Row %	25.0	25.0	16.7	8.3	8.3	8.3	8.3	
Col %	42.9	37.5	15.4	25.0	50.0	9.1	11.1	22.2%
HOW %	2	2	1	3	1	4	4	17
Row %	11.8	11.8	5.9	17.6	5.9	23.5	23.5	
Col %	28.6	25.0	7.7	75.0	50.0	36.4	44.4	31.5%
HEBREW	1	2	3	0	0	3	1	10
Row %	10.0	20.0	30.0	0.0	0.0	30.0	10.0	
Col %	14.3	25.0	23.1	0.0	0.0	27.3	11.1	18.5%
FRENCH	1	1	7	0	0	3	3	15
Row %	6.7	6.7	46.7	0.0	0.0	20.0	20.0	
Col %	14.3	12.5	53.8	0.0	0.0	27.3	33.3	27.8%
COLUMN TOTAL	7	8	13	4	2	11	9	54
%	13.0	14.8	24.1	7.4	3.7	20.4	16.7	100.0%

TABLE XC: CONTRASTIVE LANGUAGE PROBLEMS BY GRADE

Grade	yes			no			+	Total %
	lex %	gram %	phon %	lex %	gram %	phon %		
N/K	3	2	7	0	0	5	1	18
Row %	16.7	11.1	38.9	0.0	0.0	27.8	5.6	
Col %	42.9	25.0	53.8	0.0	0.0	45.4	11.1	33.3%
1	2	4	5	1	1	2	3	18
Row %	11.1	22.2	27.8	5.6	5.6	11.1	16.7	
Col %	28.6	50.0	38.5	25.0	50.0	18.2	33.3	33.3%
2	1	1	0	3	0	3	4	12
Row %	8.3	8.3	0.0	25.0	0.0	25.0	33.3	
Col %	14.3	12.5	0.0	75.0	0.0	27.3	44.4	22.2%
3	1	0	0	0	1	0	0	2
Row %	50.0	0.0	0.0	0.0	50.0	0.0	0.0	
Col %	14.3	0.0	0.0	0.0	50.0	0.0	0.0	3.7%
NON GRADE	0	1	1	0	0	1	1	4
Row %	0.0	25.0	25.0	0.0	0.0	25.0	25.0	
Col %	0.0	12.5	7.7	0.0	0.0	9.1	11.1	7.4%
COLUMN TOTAL	7	8	13	4	2	11	9	54
%	13.0	14.8	24.1	7.4	3.7	20.4	16.7	100.0%

*Contrastive problems: Yes
No

lex = lexical
gram = grammar
phon = phonology
+ = other (subsumes 5 categories)

encountered. Such problems have either been overcome or they are accepted as insuperable and, therefore, undeserving of further attention.

13.0 Interlingual Interferences, Aids and Switching

As between interlingual interferences, aids and switching, the latter are more common than the former and all are more common when the EMT is utilized as a medium than when English alone is employed.

13.1 Those contexts in which both media of instruction are co-present lead to the greatest number of occurrences of "interlingual variation" (Table XIA). Particularly noteworthy under such circumstances are occurrences of switching back and forth from one language to the other. Less obvious is the fact that in all cases the direction of impact is greater from EMT into English than vice versa. Thus, when we consider interferences, there are more occurrences of EMT interferences in English than vice versa. When we note "aids" (using one language to explain something in the other), once again EMT is used to explain an English text or problem more often than vice versa. Finally, when switching occurs in mid-stream (mid-sentence, mid-phrase), it occurs into English more frequently than out of it. This may be but another reflection on the concern with English, both teacher concern ("aids") and investigator concern. Or it may reflect the basically greater facility in English on the part of most students so that they more frequently wind up in English even if they began an utterance in the EMT.

13.2 The Hebrew and French schools reveal the fewest instances of

TABLE XII: INTERLINGUAL INTERFERENCES, AIDS* AND SWITCHING, BY LANGUAGE

- 32 -

Language	EMT →		ENG →		ENG ←		EMT ←		EMT -		ENG -		+ n	Row n Total %
	n	ENG %	n	EMT %	n	EMT %	n	ENG %	n	ENG %	n	EMT %		
ENGLISH	6		0		5		1		4		1		0	17
Row %		35.3		0.0		29.4		5.9		23.5		5.9		0.0
Col %		33.3		0.0		45.5		25.0		20.0		10.0		0.0
EMT	5		5		0		2		5		0		2	19
Row %		26.3		26.3		0.0		10.5		26.3		0.0		10.5
Col %		27.8		50.0		0.0		50.0		25.0		0.0		100.0
BOTH	7		5		6		1		11		9		0	39
Row %		17.9		12.8		15.4		2.6		28.2		23.1		0.0
Col %		38.9		50.0		54.5		25.0		55.0		90.0		0.0
COLUMN TOTAL	18		10		11		4		20		10		2	75
%		24.0		13.3		14.7		5.3		26.7		13.3		2.7
														100.0%

TABLE XIII: INTERLINGUAL INTERFERENCES, AIDS AND SWITCHING, BY SCHOOL*

School	EMT →		ENG →		ENG ←		EMT ←		EMT -		ENG -		+ n	Row n Total %
	n	ENG %	n	EMT %	n	EMT %	n	ENG %	n	ENG %	n	EMT %		
ARMENIAN	5		5		3		2		2		2		1	20
Row %		25.0		25.0		15.0		10.0		10.0		10.0		5.0
Col %		27.8		50.0		27.3		50.0		10.0		20.0		50.0
ARABIC	4		2		5		1		9		7		1	29
Row %		13.8		6.9		17.2		3.4		31.0		24.1		3.4
Col %		22.2		20.0		45.5		25.0		45.0		70.0		50.0
HEBREW	1		1		2		0		5		1		0	10
Row %		10.0		10.0		20.0		0.0		50.0		10.0		0.0
Col %		5.6		10.0		18.2		0.0		25.0		10.0		0.0
FRENCH	8		2		1		1		4		0		0	16
Row %		50.0		12.5		6.3		6.3		25.0		0.0		0.0
Col %		44.4		20.0		9.1		25.0		20.0		0.0		0.0
COLUMN TOTAL	18		10		11		4		20		10		2	75
%		24.0		13.3		14.7		5.3		26.7		13.3		2.7
														100.0%

TABLE XIV: INTERLINGUAL INTERFERENCES, AIDS AND SWITCHING, BY SCHOOL

Grade	EMT →		ENG →		ENG ←		EMT ←		EMT -		ENG -		+ n	Row n Total %
	n	ENG %	n	EMT %	n	EMT %	n	ENG %	n	ENG %	n	EMT %		
N/K	4		6		3		1		8		1		0	23
Row %		17.4		26.1		13.0		4.3		34.8		4.3		0.0
Col %		22.2		60.0		27.3		25.0		40.0		10.0		0.0
I	8		3		2		1		4		8		1	27
Row %		29.6		11.1		7.4		3.7		14.8		29.6		3.7
Col %		44.4		30.0		18.2		25.0		20.0		80.0		50.0
II	1		0		4		1		6		1		1	14
Row %		7.1		0.0		28.6		7.1		42.9		7.1		7.1
Col %		5.6		0.0		36.4		25.0		30.0		10.0		50.0
III	0		1		0		0		0		0		0	1
Row %		0.0		100.0		0.0		0.0		0.0		0.0		0.0
Col %		0.0		10.0		0.0		0.0		0.0		0.0		0.0
NON GRADE	5		0		2		1		2		0		0	10
Row %		50.0		0.0		20.0		10.0		20.0		0.0		0.0
Col %		27.8		0.0		18.2		25.0		10.0		0.0		0.0
COLUMN TOTAL	18		10		11		4		20		10		2	75
%		24.0		13.3		14.7		5.3		26.7		13.3		2.7
														100.0%

*EMT → ENG = EMT aids in learning English; ENG → EMT = English aids in learning EMT; ENG ← EMT = interferences in learning English; EMT ← ENG = English interferences in learning EMT; EMT → ENG and ENG → EMT = switching between one language and another, + = other (subsumes 2 categories)

interlingual variation (Table XIB). These are the very schools whose students bring least EMT language skills from home and, therefore, there is also less likelihood of their use of EMT interlingually in school. In the Greek school, where the greatest number of interlingual "occurrences" is encountered, the overall tendency to impact English more than the EMT is fully corroborated.

13.3 Overall interlingual "occurrences" decrease as grade increases (Table XIC). As both languages are more fully mastered (in terms of school criteria of acceptability), interlingual "occurrences" become rare, virtually to the point of disappearance. Perhaps this should be viewed as yet another triumph of the school over the home, the community and informal literacy unrelated language use in general.

14.0 Summary and Conclusions

Each one of the major dimensional foci that originally prompted our research has been associated with a goodly amount of across-the-board regularity, i.e. it has been associated with rather clear-cut findings cutting across all media of instruction, all schools and all grades. In conjunction with the sociographic dimension, it is clear that the welter of writing system differences and writing/printing differences is reduced and rendered more manageable by stressing the printing system (whether via reading print or writing print) throughout, but particularly in the earliest grades. With respect to our ethno-pedagogic concerns, we have found that reading is attended to ever so much more than writing and that writing is attended to much more than speaking. Insofar as sociofunctional issues are concerned, we have

noted very little evidence of out-of-school participation in literacy acquisition and, correspondingly, little topical emphasis on matters pertaining to home or community. Finally, in connection with the sociolinguistic dimension we have discovered that there is hardly any awareness of or concern with non-school dialect, interlanguage contrasts or interlanguage variation.

To a very large extent, the above quantitatively documented findings agree with our more qualitative impressions. Nevertheless, our appreciation of them (particularly the latter three) benefits considerably from more restricted contextual considerations.

14.1 Findings related to medium of instruction

None of our sociographic findings require qualification related to medium of instruction. With respect to our ethnopedagogic concerns, however, it is noteworthy that in EMT-medium instruction, teacher-made materials are more commonly employed than basal readers, whereas in English-medium instruction the opposite is the case. In the latter connection, it is also interesting to remember that silent reading (rare though it was in the early grades on which our research was concentrated) was much more common in English-medium than in EMT-medium instruction. Both of these findings provide inconclusive support for the hypothesis of ethnopedagogic differences, a hypothesis which requires and merits further investigation. In connection with the sociofunctional dimension, we have found that the little out-of-school impact on literacy acquisition that can be documented occurs primarily in EMT-medium contexts. This is also the case in connection with the sociolinguistic issue of non-school dialect. On the other hand,

insofar as interlingual variation is concerned, it most commonly occurs either in contexts in which the EMT alone or (even more commonly) both the EMT and English are both being utilized. On the whole, the direction of such variation was more frequently from EMT to English than vice versa.

14.2 Findings related to school

None of our sociographic or sociolinguistic findings differ from school to school. School differences do crop up in connection with one of the sociofunctional findings in that ethnic topics are more commonly encountered than non-ethnic topics (and by a wide margin at that) only in the Hebrew school, whereas in all other schools the reverse is true. However, it is on the ethnopedagogic front that most differences between schools are encountered. The Hebrew school alone stresses analytic decoding methods more than synthetic ones (and does so in both languages). The Greek school is inordinately fond of choral reading. The French school engages in individual reading (and in small- group instruction more generally) more than do any other schools (in most of which the entire class is the favorite unit of instruction). In the Hebrew and French schools, teacher-made materials are more commonly employed than basal readers whereas the opposite is true in the other two schools. All in all, although every school is distinctive, there are a number of similarities between the Greek and Armenian school on the one hand and the French and Hebrew school on the other hand. The latter two schools are smaller and have the smallest proportions of EMT speaking and non-English speaking pupils.

14.3 Differences between grades

Certain between-grade differences "favor" the lower grades in the sense that they reveal higher incidences of certain phenomena than do the higher grades. In the lower grades, there are more "occurrences" of teacher-made materials, of choral reading (both of the foregoing pertaining to ethnopedagogic issues), of non-school dialect correction and of interlingual variation (both of the latter pertaining to sociolinguistic issues). On the other hand, certain between-grade occurrences "favor" the higher grades. In the higher grades there are more "occurrences" of writing (a matter of sociographic interest to us), as well as more "occurrences" of sentence reading, individual instruction and individual reading (all of these being ethnopedagogic issues).

14.4 Frequency of contextualization

All in all, we have noted only one contextualization along the sociographic dimension (see 14.3, above), two along the sociofunctional dimension (see 14.1 and 14.2), four along the sociolinguistic dimension (see 14.1 and 14.3) and twelve along the ethnopedagogic dimension. Obviously, the last named dimension reveals much more variation from school to school than does any of the others. This may be taken as further (albeit inconclusive) support for the advisability of additional research to clarify the ethnopedagogic dimension and to test various ethnopedagogic hypotheses pertaining to it (see 14.1, 14.2 and 14.3, above).

15.0 Methodological Postscript

In comparison with our previous report based upon unenumerated (overall) ethnographic impressions, the present report finds much more

variability along the ethnopedagogic dimension and much less documentation with respect to the sociofunctional dimension than expected. Since there is no overriding reason to generally prefer or rely upon one method over the other, it is necessary to reflect further on the different findings yielded by the different methods employed. The "number of occurrences," the basic unit utilized in the present report, may well be a reflection of observer/ethnographer interest more than a reflection of actual differences in rates of occurrence. Similarly, the seeming absence of "occurrences" of out-of-school influences upon the literacy acquisition process may merely reflect the fact that such occurrences primarily take place out of school, whereas our ethnography was primarily school based. No correction could be made for this as long as we were engaged in "occurrence" counting analyses. However, in reporting our more global impressions (Fishman, Riedler-Berger, Steele and Koling 1981), we could emphasize investigator impressions of the importance of occurrences over and above their incidence (and their incidence at school alone to boot). It would appear, therefore, that a modicum of inter-method disagreement must be tolerated, both as a corrective against overly hasty conclusions, on the one hand, and as a guide to further needed research, on the other hand.

With respect to the quantitative analysis of ethnographic data, such analysis is not only possible but a valuable addition to the usually preferred qualitative treatment of such data. Indeed, our current study has produced sufficiently provocative results for the data to be fully reanalyzed as follows:

- (a) More definitive definition of categories, combination of categories that have proved to be rare, utilization of new categories prompted by post-hoc considerations.
- (b) Utilization of a second reader (scorer/rater) throughout and a third reader (or some other impartial convention) where the two major readers disagree after consultation. This procedure will also contribute to redefinitions before a fully final set is agreed upon. Reliability of coding must be established before data analysis is attempted.
- (c) Categories should be scored in a fashion that anticipates obtaining inter-category correlations via computer processing methods. Most categories should be dichotomies scored on a 0/1 basis.
- (d) Intercorrelation matrices, factor analyses and multiple prediction of selected criterion scores would, when taken together, extract the full quantitative promise from the rich body of data that has been accumulated for the present preliminary study.
- (e) Further qualitative exploration of our data is fully merited in its own right. Given the unlikelihood of obtaining parental and community data from school-focused ethnographies, and given the crucial nature of such data (particularly vis-a-vis the socio-functional dimension of biliteracy acquisition), it would be highly advisable to supplement the analyses mentioned in (d), above, with interview and attitude data obtained directly from parents. The modicum of such data obtained for the present study was never analyzed due to lack of time.

16.0 Bibliography*

- Fishman, Joshua A. Ethnocultural dimensions in the acquisition and retention of biliteracy. Basic Writing, 1980, 3, no. 1, 48-61.
- Fishman, Joshua A., Michael H. Gertner, Esther G. Lowy and William G. Milan. Language maintenance, the "ethnic revival" and diglossia in the U.S.A. Journal of Intercultural Studies, 1982, 3, no. 1, 5-24.
- Fishman, Joshua A., Carole Riedler-Berger, Phyllis Koling and J. Mark Steele. The Acquisition of Biliteracy: A Comparative Ethnography in Minority Ethnolinguistic Schools in New York City. Final Report (First part) to NIE re grant number G-79-0122. New York, Yeshiva University, 1982.

*Additional extensive references to biliteracy in particular and to literacy more generally (particularly: literacy as a by-product of societal processes) are listed in items 1 and 3, below.