DOCUMENT RESUME

ED 316 158 HE 023 283

AUTHOR Ott, Mary Diederich; And Others

TITLE A Study of the Foreign Language Preparation of New

Freshmen (Fall 1985).

INSTITUTION Maryland Univ., College Park. Office of Institutional

Studies.

PUB DATE Apr 86 NOTE 28p.

PUB TYPE Statistical Data (110) -- Reports -

Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS College Freshmen; Higher Education; High School

Graduates; *Language Enrollment; *Second Language

Learning; Second Language Programs; *Student

Characteristics; Undergraduate Students

IDENTIFIERS *University of Maryland College Park

ABSTRACT

The report presents an analysis of the foreign language preparation of first-time undergraduate students at the University of Maryland College Park (UMCP). Basic areas of interest addressed included: the percentage of first-time students with either at least 2 or at least 3 years of preparation in a single foreign language in high school; how the language preparation was distributed among various foreign languages; and characteristics of students who did or did not have at least 2 years or at least 3 years of preparation in a foreign language. A random sample of 398 of the new freshmen as of fall 1985 was chosen for the study. Analysis of high school transcripts indicated: at least 87.4% had completed 2 or more years of a foreign language; at least 59% had completed 3 or more years of a foreign language; completion of a minimum of 2 or 3 years of a foreign language was not significantly related to age, race, or academic division; students from out-of-state had higher rates of language study at the criterion levels than did in-state students; students with higher rates of foreign language study had higher mean SAT scores; greater proportions of women than of men had studied 3 or more "ears of a foreign language; and lower proportions of part-time students than full-time students had studied 3 or more years of a foreign language. Eleven tables detail the data. (SM)

Reproductions supplied by EDRS are the best that can be made

* from the original document.



A STUDY OF THE FOREIGN LANGUAGE PREPARATION OF NEW FRESHMEN (FALL 1985)

Mary Diederich Ott Theodore S. Markewich Nancy L. Ochsner Susan L. Slyter

Prepared by:

Office of Institutional Studies 2132 Main Administration The University of Maryland College Park College Park, Maryland 20742

April 1986

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Diederich Ott

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

to his document has been reproduced as received from the person or organization originating it

Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy



0

3

A Study of the Foreign Language Preparation of New Freshmen (Fall 1985)

At the request of the Administrative Dean for Undergraduate Studies, the Office of Institutional Studies analyzed the foreign language preparation of first-time undergraduate students at UMCP. There has been a great deal of debate concerning the possible effects on size and academic characteristics of future freshman classes if a foreign language entrance requirement were established. Consideration is being given to requiring two or possibly three years of foreign language study in high school for admission to UMCP. This study addressed basic questions of interest including the following: What percentage of first-time students had at least two, or at least three, years of preparation in a single foreign language in high school? How was language preparation distributed among various foreign languages? What are the characteristics of students who did or did not have at least two years of preparation in a foreign language? At least three years of preparation? These questions could not be answered readily because foreign language and other high school transcript data are not captured in the Campus computerized data system. Consequently the study required the selection of a sample of students and retrieval of data from their admissions folders.

Sample Selection

A random sample (\underline{N} = 444) of the 4,522 new freshmen as of Fall 1985 was selected for this study. Twenty-nine students were eliminated because they were not U.S. citizens and were presumed to have a "foreign language" as a first language. With the cooperation of the Office of Undergraduate Admissions, the admissions folders of the remaining 415 students were pulled,

BEST COPY AVAILABLE



their high school transcripts were photocopied, and their foreign language preparation was coded and added to their enrollment file records. These computerized records include such variables as: race, major, full-time/part-time status, SAT Verbal and Math scores, birthdate, sex, in-state or out-of-state residence status, and registered credits. Ten folders could not be located and seven folders did not contain any high school transcripts; therefore, the final sample numbered 398. Compared to the population of new freshmen who were U.S. citizens and who enrolled at the College Park Campus for the first time in Fall 1985 (N=4,230), the sample is very similar in terms of such key variables as sex, race, SAT Verbal and Math scores, age, residence status, departmental grouping, and number of registered credits. (See Table 1.)

Current Admissions Requirements

Total SAT scores and high school GPA in academic subjects for grades 9 through 11 are determinants of admission to UMCP. If Maryland residents do not meet the criteria for admission at the end of grade 11, they may be considered via the Individual Admission Program (taking into account personal histories, extra-curricular accomplishments, and/or personal recommendations), or they may be considered when midyear grades are available for the senior year in high school. Out-of-state applicants generally are required to have higher SAT scores and high school grades than the minimum in-state requirements.

The grades for foreign language courses taken in high school are included in the calculation of the academic high school GPA used for admissions purposes, but there is no foreign language requirement. However, the 1985-1986 Undergraduate Catalog states that students "are strongly encouraged to take at least 2 years of a foreign language...." (p.28)



Methodology

This study used the information provided in the students' admissions folders, along with computerized information from applicant and enrollment files. To determine foreign language preparation, a matrix was established for each student. The matrix showed each grade level (7 through 12) for each foreign language. The course level was entered into the appropriate cell. For instance, if a student took (and passed) French I in 9th grade and French II in 10th grade, the cell reflecting French in 9th grade would have a one and the cell for French in 10th grade would have a two. In addition to coding the specific language(s) taken, the level of the course, and the school year in which the course was taken, the length of the high school transcript available was indicated (i.e., 11, 11-1/2, or 12). Most students had transcripts up through the 12th grade; 10 percent of the transcripts included only one semester of 12th grade and 26 percent only went through the 11th grade.

Advanced Placement (AP) courses and honors courses were counted as regular foreign language courses in the following analyses but were also coded as honors courses for possible use in future data analyses. Since most foreign language courses are year-long courses, if the transcript ended midyear, the first semester of a language was assumed to represent a year of a foreign language. Only courses which students successfully completed (with a passing grade of D or better or the numerical equivalent) were recorded. Foreign language introductory courses (in which a combination of several languages was taught in one year) were recorded separately, but not included in the following data analyses.



Based on the transcript information, the proportions of students who had completed various numbers of years of any one language are as follows:

One or more years -- 96.5%

Two or more years -- 87.4%

Three or more years -- 59.0%

Four or more years -- 25.1%

Five or more years -- 9.0%

Six or more years -- 0.3%

These proportions might be slightly higher if 12th grade coursework information were available for all students.

Table 2 presents the percentages of students who had completed from one to six years of Spanish, French, German, Latin, Hebrew, Italian, Russian and/or Greek. It also presents the percentages who had completed from one to six years of any one language. The most typical preparation in a language was three years; 33.9 percent of the sample had completed three years of any one foreign language. Table 3 indicates the proportions of students having two or more or three or more years of specific languages, and of any one language. The proportions who had completed two or more versus three or more years of any one language are quite different -- 87.4 percent versus 59.0 percent.*

Results

Because of the interest in whether to require two or three years of a foreign language for admission to UMCP, the analysis focused on characteristics of students with and without two years and students with and without three years of preparation in a foreign language. Chi-square analyses and t-tests were performed when appropriate.

^{*}In addition to the students who had taken three or more years of one language, three percent of the sample had taken two years of one language and one year of another language; 2.3 percent had taken two years each of two languages.



Comparisons for the groups are displayed in Tables 4 through 11. Table 4 presents data by sex of student. Note that there is a significant relationship between sex of student and completion of three or more years of a language. Female students were more likely than males to have completed three or more years of a foreign language.

An analysis by race is given in Table 5. Although somewhat lower proportions of Blacks and higher proportions of Hispanics than of the other groups had completed a minimum of two or of three years of language study, the relationships between race and years of language study were not statistically significant.

Table 6 shows years of foreign language study by students' ages. Mean ages of students who had taken two or more versus less than two years of a foreign language did not differ significantly. Mean ages of those who had taken three or more versus less than three years of a foreign language also did not differ significantly.

Table 7 presents years of foreign language study by departmental groupings. Table 8 presents this information by academic division. Among academic divisions, the lowest proportions of students with two or more or three or more years of foreign language preparation are found in the Division of Arts and Humanities.* In addition, lower proportions of students in the composite category which includes General Studies, Allied Health, and Intensive Educational Development than in the overall sample had completed



^{*}Chi-square analysis is not reliable for comparing numbers of students in the academic divisions having or not having a minimum of two years of foreign language preparation. This results because the minimum expected cell frequency is less than four. For the comparison of numbers of students in the academic divisions having or not having a minimum of three years of foreign language preparation, the chi-square statistic was not significant $(\underline{p} = .29)$.

three or more years of a foreign language. The relatively low level of language completion in the Division of Arts and Humanities appears to result from the language preparation of students in the departmental grouping of Art, Dance, Theatre, Radio, Television and Film, Speech and Music.

Table 9 gives years of foreign language study by credits attempted in Fall 1985. Because the minimum expected cell frequency is less than four, the chi-square test for two or more versus less than two years of language study is not reliable. However there is a significant relationship between credits attempted and years of language study when one compares those who completed three or more versus less than three years of language study. Those registered for less than 12 credits (i.e., part-time students) were less likely to have completed three or more years of study in a foreign language than were those registered for 12 or more credits.

Table 10 presents data for in-state and out-of-state students. For both levels of language preparation, years of foreign language study were significantly related to billing residence. Out-of-state students were more likely than in-state students to have two or more or three or more years of foreign language study.

Finally, Table 11 presents an analysis of the SAT scores of students with differing numbers of years of foreign language study. For the SAT Verbal score, the SAT Math score, and the Total SAT score, students with more language preparation have significantly higher mean scores than those with less language preparation. These results were found for the comparison of those with two or more versus less than two years of foreign language study and for the comparison of those with three or more versus less than three years of foreign language study.



Discussion

This analysis of the high school transcripts of a random sample of Fall 1985 new freshmen indicates that at least 87.4 percent had completed two or more years of a foreign language. At least 59.0 percent had completed three or more years of a foreign language. In order, the most commonly studied languages were Spanish, French, Latin and German. A few students had studied Hebrew, Italian, Russian, and Greek.

Completion of a minimum of two or of a minimum of three years of a foreign language was not significantly related to the age, race, or academic division of the students. Other student characteristics did differ by years of foreign language study, particularly at the three-year criterion level.

For both the two-year language completion analysis and the three-year language completion analysis, we found: (1) students from out-of-state had higher rates of language study at the criterion levels than did in-state students; (2) students with higher rates of foreign language study had higher mean SAT scores (Verbal, Math, and Total).

For the three-year language completion analysis, but not the two-year analysis, we found the following significant results: (1) greater proportions of women than of men had studied three or more years of a foreign language; (2) lower proportions of part-time students (i.e., those registered for less than 12 credits) than of full-time students had studied three or more years of a foreign language.



-7 - 9

TABLE 1 COMPARISON OF SAMPLE TO THE POPULATION OF FIRST-TIME STUDENTS, FALL 1905

		mule	Population		
	N	<u> </u>	- 11	<u> </u>	
TOTAL	398	100.0	4,230	190.0	
Sex					
Konen	195	49.0	2,045	48.3	
Men	203	51.0	2,185	51.7	
			-,	****	
Race	_				
American Indian	0	0.0	3	0.2	
Black	41	10.3	497	11.7	
Asian Historia	22	5.5	251	5.9	
Hispanic White	10	2.5	79	1,9	
Unknown	32 5	81.7	3,389	80.1	
Ollyllowii	U	0.0	6	0.1	
Residence Status					
Maryland	311	78.1	3,223	76.2	
Non-Maryland	87	21.9	1,007	23.8	
Banautmontal Cucumdan					
Departmental Grouping Division of Ag. & Life Sciences					
Agriculture	5	1.3	70		
Life Sciences	12	3.0	72 225	1.7 5.3	
Undecided	2	0.5	44	1.0	
	•	0.4	44	**0	
Division of Arts & Humanities					
Architecture and Pre-Architectur	e 6	1.5	93	2.2	
Art, Dance, Theatre, RTVF,					
Speech, Music	19	4.8	184	4.3	
Other declared majors	20	5.0	214	5.1	
Undecided	8	2.0	34	0.8	
Division of Behavioral & Soc. Sci.					
Business and Pre-Business	78	19.6	798	18.9	
Other declared majors	33	8.3	343	8.1	
Undecided	2	0.5	22	0.5	
Division of Human and Comm. Resource					
Education and Pre-Education	11	2.8	131	3.1	
Other declared majors	11	2.8	103	2.4	
Undecided	0	0.0	4	0.1	
Division of Math. & Phys. Sci. & En	a				
Engineering and Pre-Engineering	68	17.1	738	17.4	
Other declared majors	27	6.8	264	6.2	
Undecided	3	0.8	13	0.3	
11 1 2 2 2					
Undergraduate Studies	~ ~		44.44.		
Undecided major and division General Studies	66	16.6	687	16.2	
Individual Studies	6 0	1.5	35	0.8	
MINITIONAL SUNIES	U	0.0	1	0.0	
Allied Health	13	3.3	148	3.5	
The contract of the party and the contract of			470		
Intensive Educational Development	8	2.0	77	1.8	

	Sample			Population		
SAT Scores	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Verba1	395	482	82	4,116	477	90
Math	395	533	95	4,116	535	98
Age at Entrance	396	17.8	1.0	4,226	18.1	3.8
Current (Fall 1985) Registered Credits	398	13.7	1.7	4,230	13.5	2.0

Note: Foreign students were eliminated from both the sample and the population.



PERCENTAGE OF STUDENTS IN SAMPLE WHO HAD COMPLETED FOREIGN LANGUAGE COURSEWORK, BY LANGUAGE

Years of Foreign Language Coursework

0.0

33.9%

0.0

16.1%

0.0

8.8%

3 0 Language 1 2 5 6 Spanish 44.7% 6.3% 16.3% 18.3% 9.8% 4.5% 0.0% French 63.1 4.5 9.8 13.3 5.3 3.8 0.3 Latin 89.7 4,8 4.5 0.8 0.3 0.0 0.0 German 91.2 2.3 3.0 2.0 0.8 0.8 0.0 Hebrew 99.5 0.0 0.0 0.3 0.3 0.0 0.0 Italian 99.5 0.0 0.5 0.0 0.0 0.0 0.0 Russian 99.5 0.5 0.0 0.0 0.0 0.0 0.0

0.0

28.4%

Note: Each percentage was calculated in reference to the total sample (N = 398).

0.3

9.0%

99.7

3.5%



0.0

0.3%

Greek

Any One Language

TABLE 3
YEARS OF FOREIGN LANGUAGE STUDY
BY LANGUAGE

Years of Foreign Language Study Language Two or Morea Three or Moreb Spanish 49.0% 32.7% French 32.4 22.6 Latin 5.5 1.0 German 6.5 3.5 Hebrew 0.5 0.5 Italian 0.5 0.0 Russian 0.0 0.0 Greek 0.0 0.0 Any One Language 87.4% 59.0%

Note. Each percentage was calculated in reference to the total sample (N = 398).



apercent having two or more years of the same foreign language.

bpercent having three or more years of the same foreign language.

TABLE 4
YEARS OF FOREIGN LANGUAGE STUDY
BY SEX OF STUDENT

<u>Sex</u>	N	Two or Morea	Less than Two ^b	Three or More ^C	Less than Threed
Females	195	90.8%	9.2%	67.2%	32.8%
Males	203	84.2	15.8	51.2	48.8
Tota1	398	87.4%	12.6%	59.0%	41.0%

Corrected χ^2 (1, $\frac{N}{p} = 398$) = 3.29, $\frac{p}{p} = .07$

Years of Foreign Language Study

Corrected χ^2 (1, $\frac{N}{D}$ = 398) = 9.81, $\frac{p}{\sqrt{01}}$

a Percent having two or more years of the same foreign language.

b Percent having less than two years of the same foreign language.

C Percent having three or more years of the same foreign language.

d Percent having less than three years of the same foreign language.

TABLE 5
YEARS OF FOREIGN LANGUAGE STUDY
BY RACE OF STUDENT

		Years of Foreign Language Study					
Race	N	Two or Morea	Less than Two ^b	Three or More ^C	Less than Threed		
Black	41	80.5%	19.5%	48.8%	51.2%		
Asian	22	90.9	9.1	68.2	31.8		
Hispanic	10	100.0	0.0	90.0	10.0		
White	325	87.7	12.3	58.8	41.2		
Tota1	398	87.4%	12.6%	59.0%	41.0%		
		χ2	$(3, \frac{N}{p} = 398) = 3.50,$ $\frac{D}{p} = .32$	χ^2 (3, 1	$\frac{N}{D} = 398) = 6.52,$		

a Percent having two or more years of the same foreign language.



b Percent having less than two years of the same foreign language.

^C Percent having three or more years of the same foreign language.

d Percent having less than three years of the same foreign language.

TABLE 6
YEARS OF FOREIGN LANGUAGE STUDY
BY AGE OF STUDENT

			Years of Foreig	n Language Study	•
Age (in years)	<u>N</u>	Two or Morea	Less than Twob	Three or Morec	Less than Threed
16 - 17	116	85.3%	14.7%	55.2%	
18	260	89.2	10.8	61.9	44.8%
19 - 31	20	80.0	20.0	50.0	38.1
Missing data	2	50.0	50.0		50.0
			50.0	0.0	100.0
Total	398	87.4%	12.6%	59.0%	41.0%
Mean Age		17.8	18.0	17.8	17.9
Standard Deviat	tion	0.75	2.00	0.63	1.35
N of Cases		$ \frac{\mathbf{t}}{\mathbf{p}} = \frac{(50)}{\mathbf{p}} $	49)e = .68, .50	235 <u>t</u> (2	161 08)e = .61, .54

a Percent having two or more years of the same foreign language.



b Percent having less than two years of the same foreign language.

C Percent having three or more years of the same foreign language.

d Percent having less than three years of the same foreign language.

e Separate variance estimate.

TABLE 7
YEARS OF FOREIGN LANGUAGE STUDY
BY DEPARTMENTAL GROUPING

•			Years of Foreign	n Language Study	
Departmental Grouping	N	Two or More	Less than Two ^b	Three or Morec	Less than Thre
Div. of Ag. & Life Sciences					Less than thre
Agriculture	5	60.00			
Life Sciences	12	60.0%	40.0%	0.0%	100.0%
Undecided	2	100.0	0.0	66.7	33.3
	4	100.0	0.0	100.0	0.0
Div. of Arts & Humanities					0.0
Pre-Arch. & Architecture	6		[
Art, Dance, Theatre, RTVF,	n	83.3	16.7	50.0	E0 0
Speech & Music	10	<u>-</u>	İ	444	50.0
Other declared majors	19	57.9	42.1	31.6	* * *
Undecided	20	80. 0	20.0	65.0	68.4
Since Idea	8	100.0	0.0	50.0	35.0
Div. of Rehautonal # cas car			•••	⊅∪, U	50.0
Div. of Behavioral & Soc. Sci. Business & Pre-Business					
Other declared	78	91.0	9.0	5 0.0	
Other declared majors	33	93.9	6.1	59.0	41.0
Undecided	2	100.0	0.0	63.6	36.4
District of House and the		******	V•V	100.0	0.0
Div. of Human & Comm. Resources					•
Education and Pre-Education	11	81.8	,,,		
Other declared majors	īī	100.0	18.2	45.5	54.5
Undecided	Ô	100.0	0.0	63.6	36.4
	U	•	- 1	•	₩.
Div. of Math. & Phys. Sci. & Eng.			į.		
Engineering & Pre-Engineering	68	83.8			
Other declared majors	27		16.2	60.3	39.7
Undecided	3	85.2	14.8	59.3	40.7
	3	100.0	0.0	66.7	33.3
Indergraduate Studies				- -	33.3
Undecided	cc				
General Studies	66	90.9	9.1	69.7	20.2
Individual Studies	6	100.0	0.0	50.0	30.3
	0	•		50.V	50.0
lied Health			}	-	-
THE HEAT LIT	13	100.0	0.0	£1 E	<u> </u>
ntencius Education Down			•••	61.5	38.5
ntensive Education Development	8	62.5	37.5	05.0	
·			37.5	25.0	75.0
11 Damant					
11 Departmental Groupings	398	87.4%	12 60		
	- -	U1 478	12.6%	59.0%	41.0%

a Percent having two or more years of the same foreign language.

d Percent having less than three years of the same foreign language.



b percent having less than two years of the same foreign language.

C Percent having three or more years of the same foreign language.

TABLE 8

YEARS OF FOREIGN LANGUAGE STUDY
BY DIVISION

Dévit et e			Years of Foreig	n Language Study	
Division	N	Two or Morea	Less than Twob	Three or Morec	Less than Three
ALSC	19	89.5%	10.5%	52.6%	
A & H	53	75.5	24.5		47.4%
BSOS	113	92.0		49.1	50.9
HUCR			8.0	61.1	38.9
	22	90.9	9.1	54.5	45.5
MPSE	98	84.7	15.3	60.2	39.8
Undecided	66	90.9	9.1	69.7	
Other ^e	27	88.9		09.7	30.3
		00, 9	11.1	48.1	51.9
Total	398	87.4%	12.6%	59.0%	41.0%
		χ ² is not reli minimum expect frequency is l	ed cell	χ^2 (6, N = 398) = $p = .29$	7.36,

a Percent having two or more years of the same foreign language.

b Percent having less than two years of the same foreign language.

^C Percent having three or more years of the same foreign language.

d Percent having less than three years of the same foreign language.

e "Other" includes General Studies, Allied Health, and Intensive Educational Development.

TABLE 9
YEARS OF FOREIGN LANGUAGE STUDY
BY CREDITS ATTEMPTED

		χ^2 is not reliable because minimum expected cell frequency is less than 4.		χ^2 (2, N = 39 \underline{p} < .01	8) = 10.02,		
Total	398	87.4%	12.6%	59.0%	41.0%		
More than 14	109	88.1	11.9	67.9	32.1		
	272	88.2	11.8	57.4	42.6		
12 to 14		70.6%	29.4%	29.4%	70.6%		
Less than 12	<u>N</u> 17	Two or Morea	Less than Twob	Three or More ^C	Less than Threed		
Credits Attempted	N	Years of Foreign Language Study					

a Percent having two or more years of the same foreign language.



b Percent having less than two years of the same foreign language.

C Percent having three or more years of the same foreign language.

d Percent having less than three years of the same foreign language.

TABLE 10

YEARS OF FOREIGN LANGUAGE STUDY
BY BILLING RESIDENCE

Billing			Years of Foreig	n Language Study	
Residence	N	Two or Morea	Less than Two ^b	Three or More ^C	Less than Threed
In-State	311	85.5%	14.5%	55.6%	44.4%
Out-of-State	87	94.3	5.7	71.3	28.7
Tota1	398	87.4%	12.6%	59.0%	41.0%
		Corrected χ^2 (1)	$\frac{N}{< .05} = 3.95$	Corrected χ^2 (1, \underline{p}	$\frac{N}{1} = 398 = 6.24,$

a Percent having two or more years of the same foreign language.

25

b Percent having less than two years of the same foreign language.

^C Percent having three or more years of the same foreign language.

d Percent having less than three years of the same foreign language.

TABLE 11

YEARS OF FOREIGN LANGUAGE STUDY
BY SCHOLASTIC APTITUDE TEST (SAT) SCORES

		Years of Foreig	n Language Study	
SAT Scores	Two or Morea	Less than Two ^b	Three or More ^C	Less than Threed
Verbal SAT Mean Standard Deviation N of Cases Range		460 81 49 280-690 = 2.00,	490 83 234 210-740 <u>t</u> (393) = p <	470 80 161 280-690
Math SAT Mean Standard Deviation N of Cases Range		498 90 49 300-660 = 2.77,	546 98 234 200-800 <u>t</u> (393) =	513 87 161 300-800
Total SAT Mean Standard Deviation N of Cases Range		958 138 49 610-1220 = 2.84, < .01	1,036 156 234 470-1430 <u>t</u> (393) = <u>p</u> <	984 137 161 610-1370

a Values for students having two or more years of the same foreign language.

d Values for students having less than three years of the same foreign language.



b Values for students having less than two years of the same foreign language.

C Values for students having three or more years of the same foreign language.