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TABLE IV

I.Q. RANGES OF KENOSHA TECHNICAL INSTITUTE
AND SPENCERIAN BUSINESS COLLEGE STUDENTS IN
THE COURT AND CONFERENCE REPORTING PROGRAM
FOR THE YEARS 1965, 1966, 1967, and 1968

Intelligence Quotients of students who successfully completed the program and reached 200 words a minute		Intelligence Quotients of students who were unsuccessful and did not achieve 200 words a minute in the program	
Kenosha	Spencerian	Kenosha	Spencerian
131	130	138	138
123	123	135	133
121	121	123	120
119	117	119	119
117	116	117	108
116	115	117	108
115	115	116	107
114	113	115	106
112	111	113	104
109	110	112	104
109	108	111	104
109	108	110	99
105	106	108	96
	104	108	
	104	107	
	102	106	
		105	
		105	
		103	
		103	

131
123
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101
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138
133
120
119
108
108
107
106
104
104
104
99
96

115

113

Mean

114

111

115

113

Median

108

107

or four years and almost all students elect typewriting. Typewriting has become a pre-vocational rather than a vocational elective. Another reason for the inclusion of the typewriting grade was that the Stenograph's keyboard is similar to the typewriter's.

This study also wanted to determine the degree of importance previous knowledge of Gregg shorthand or any other shorthand system has in predicting success in machine shorthand.

The foreign language grade was also measured to determine if knowledge of a new sound was correlated with the ability to learn shorthand.

I.Q. Factor of Graduates

The writer felt that students having less than a 100 I.Q. could not become court reporters, and that students with I.Q.'s of "100 plus" would have a greater chance for success than students with I.Q.'s below 100.

While a high I.Q. may help one achieve success in machine shorthand, it is not the sole factor as the following table

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While a high I.Q. may help one achieve success in machine shorthand, it is not the sole factor as the following table proves. Table IV lists the I.Q. ranges of the students who were successful in attaining 200 words a minute and the I.Q. ranges of the students who failed to achieve 200 words a minute. Table IV indicates that I.Q. scores of successful students ranged from a high of 131 to a low of 102, while I.Q. scores of unsuccessful students ranged from a high of 138 to a low of 93, but at the same time there is little difference between those who did succeed and those who did not. In no instance

did any student having an I.Q. below 100 reach 200 words per minute.

The average I.Q. of the successful Kenosha students was 115. At Spencerian, it was 113. In each case, the average score was also the median.

For the unsuccessful groups, 114 was the average I.Q. at Kenosha while students at Spencerian averaged 111.

The one-point variance between the successful and unsuccessful groups at Kenosha and the two-point variance at Spencerian indicates that the groups were of almost equal ability. However, the difference of eight points for the median scores ranging from 115 to 107 indicates a larger number of low-caliber students in the unsuccessful group. The Table indicates that no one with an I.Q. below 100 achieved success in court reporting, therefore, the chances of failure in the program will be increased by a low I.Q.

From the Table it is quite evident that a high I.Q.

Spencerian indicates that the groups were of almost equal ability. However, the difference of eight points for the median scores ranging from 115 to 107 indicates a larger number of low-caliber students in the unsuccessful group. The Table indicates that no one with an I.Q. below 100 achieved success in court reporting, therefore, the chances of failure in the program will be increased by a low I.Q.

From the Table it is quite evident that a high I.Q. will not guarantee success either. The highest I.Q. of 138 at each school occurred in the unsuccessful group. Four people in this group had higher I.Q.'s than anyone in the successful group.

Having the ability to achieve does not guarantee success. Other factors such as interest in the program, personal drive, good work habits, and ability to discipline oneself to practice, play a tremendous but immeasurable role in predicting success in the Court Reporting field.

Because these people "failed" in Court Reporting, it does not mean that they were incompetent. Most of these people were very competent on the Stenograph but they dropped out of the program for a variety of reasons. Some left school to be married, to care for a family, for medical reasons, lack of interest in court reporting, or to obtain full-time employment. If they had completed the program, they might have attained 200 wpm on two-voice testimony.

High School GPA and Specific Course Grades of
Kenosha Technical Institute Graduates

Table V illustrates the grade point averages, English, typewriting, shorthand, and foreign language grades of students who successfully completed the Court and Conference Program at Kenosha Technical Institute.

Table VI presents the grade point averages, English, typewriting, shorthand, and foreign language grades of students who failed to achieve 200 words per minute on two-voice testimony which is the culminating course in the Court Reporting Program.

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Table VI presents the grade point averages, English, typewriting, shorthand, and foreign language grades of students who failed to achieve 200 words per minute on two-voice testimony which is the culminating course in the Court Reporting Program.

Tables V and VI are arranged according to high school grade point values with the zero to 100 scale presented first. Then the four-point scale arranged in descending order follows. The Tables are further broken down into two sections: those students who had a grade point average of "B or better" in high school, and those students who had "C or lower" averages. The four major categories used in every table are:

1. Successful "B or better" high school GPA

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1. Successful "B or better" high school GPA

2. Successful "C or lower" high school GPA
3. Unsuccessful "B or better" high school GPA
4. Unsuccessful "C or lower" high school GPA

There is a fairly high correlation of English grades with grade point average. In the majority of cases, the A's in English were earned by students whose grade point average equaled "A"; B's were earned by "B" students; and C's were earned by "C" students. There were no D's. No one with an "A" or "B" grade point average obtained a "C" in English nor did anyone with a "C" average obtain an "A" in English. But five people in the "C or lower" group received B's in English, three students in the unsuccessful group and two students in the successful group. With few exceptions, the English grade seems to be closely correlated with the grade point average.

The typing grade was also included in the study because of the similarity of the Stenograph keyboard with the type-

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The typing grade was also included in the study because of the similarity of the Stenograph keyboard with the typewriter. All of the successful students received either an "A" or "B" in typewriting which should indicate finger dexterity. This is the one course included in the study in which unsuccessful students in the "C or lower" group were able to earn the greatest number of A's and B's. Five of the eighteen students received an "A" in typewriting; another five received a "B." Eight people in the "C or lower" group shown in Table VI received C's in typewriting which could indicate that they might have some problems with the Stenography in regard to speed and accuracy. No one earned a "D."

TABLE V

GRADE POINT AVERAGES, ENGLISH, TYPING, SHORTHAND
AND FOREIGN LANGUAGE GRADES OF KTI STUDENTS WHO
SUCCESSFULLY COMPLETED THE COURT REPORTING COURSE
AND REACHED 200 WPM ON TWO-VOICE TESTIMONY

	High School GPA*	English	Typing	Shorthand	Languages
"B" or better average	92.2	A	A	-	A Latin
	87.0	B	B	B	-
	3.82	A	A	A	-
	3.79	A	A	A*	-
	3.66	A	A	A	A Latin
	3.56	A	A	-	A Latin
	3.07	A	A	A*	-
	3.05	B	A	A	B French
	3.00	B	A	A*	-
"C" or lower	83.4	B	B	-	C French
	2.59	B	B	B	-
	2.56	C	A	A	C French
	2.18	C	B	A	C German C Latin

*Machine Shorthand

On a 4.0 scale:

On 100 point scale:

"C" or lower	83.4	B	B	-	C French
	2.59	B	B	B	-
	2.56	C	A	A	C French
					C German
	2.18	C	B	A	C Latin

*Machine Shorthand

On a 4.0 scale:

A = 3.5 - 4.00
 B = 3.0 - 3.59
 C = 2.0 - 2.99
 D = 1.0 - 1.99

On 100 point scale:

A = 93 - 100
 B = 86 - 92
 C = 77 - 85
 D = 70 - 76

* The discrepancy in GPA's in each table occurred because some high schools assign a numerical grade to each student for each course. Thereafter, the accumulative GPA is based on the 100 point scale. Other high schools assign letter grades which are then converted to the 4.0 scale.

The chance of error was so great in converting the 100 point scale to the 4.0 scale, that the writer chose to use the exact raw scores listed on the student's high school transcript. This procedure was used throughout the study.

TABLE VI

GRADE POINT AVERAGES, ENGLISH, TYPING, SHORTHAND,
AND FOREIGN LANGUAGE GRADES OF KTI STUDENTS WHO
FAILED TO ACHIEVE 200 WPM ON TWO-VOICE TESTIMONY

	High School GPA*	English	Typing	Shorthand	Languages
"B" or better average	91.06	B	A	A	-
	87.80	A	B	-	-
	3.65	A	A	A	A Latin
	3.40	B	A	A*	-
	3.25	B	B	B	B French
	3.10	B	B	B	-
"C" or lower average	82.71	C	A	-	C Latin B Spanish
	81.6	C	C	-	-
	79.62	C	C	C	D French
	2.86	B	A	A	C Spanish
	2.83	B	C	B	-
M	2.82	C	B	-	A Spanish
	2.42	B	B	A	C Latin
	2.29	C	B	C	D Latin
	2.23	C	C	-	D Latin
	2.22	C	A	D	D Latin
	2.19	C	B	D	-
	2.18	C	A	A**	C Latin
	2.18	C	C	C	D French

"C" or	82.71	C	A	-	C Latin
lower					B Spanish
average	81.6	C	C	-	-
	79.62	C	C	C	D French
	2.86	B	A	A	C Spanish
	2.83	B	C	B	-
M	2.82	C	B	-	A Spanish
	2.42	B	B	A	C Latin
	2.29	C	B	C	D Latin
	2.23	C	C	-	D Latin
	2.22	C	A	D	D Latin
	2.19	C	B	D	-
	2.18	C	A	A**	C Latin
	2.18	C	C	C	D French
	2.12	C	C	-	-
	2.12	C	C	-	D French
	2.08	C	B	C**	C Spanish
	1.95	C	A	B	D Latin/Spanish
	1.81	C	C	-	D French

*Machine Shorthand

**Notehand

M Male

On a 4.0 scale:

A = 3.5 - 4.00
 B = 3.0 - 3.49
 C = 2.0 - 2.99
 D = 1.0 - 1.99

On 100 point scale:

A = 93 - 100
 B = 86 - 92
 C = 77 - 85
 D = 70 - 76

- As explained previously on Table V, page 71, these GPA's represent the scores as they came from the original high school.

This study attempted to determine the effect of previous knowledge of Gregg shorthand on ability to achieve success in Stenograph theory since the two systems use the same principle of writing words according to sound. Ten of the thirteen successful students had studied a shorthand system before enrolling in the Court and Conference Program at KTI. Three of these ten were from a nearby high school which offered two years of machine shorthand. Everyone in the group received either an "A" or "B" in high school shorthand. In this group three students without previous shorthand instruction were able to achieve success on the machine. This indicates that knowledge of a shorthand system is not essential for success on the machine.

Two-thirds of the unsuccessful group (16 of 24) shown in Table VI studied some form of shorthand in high school. One studied machine shorthand or Stenograph, two studied Note-hand, thirteen studied Gregg. Grades ranged from "A" to "D." It does not seem that previous knowledge of shorthand can

received either an "A" or "B" in high school shorthand. In this group three students without previous shorthand instruction were able to achieve success on the machine. This indicates that knowledge of a shorthand system is not essential for success on the machine.

Two-thirds of the unsuccessful group (16 of 24) shown in Table VI studied some form of shorthand in high school. One studied machine shorthand or Stenograph, two studied Note-hand, thirteen studied Gregg. Grades ranged from "A" to "D." It does not seem that previous knowledge of shorthand ^a can guarantee success in machine shorthand since sixteen, or twice as many students in the failure group had shorthand as compared to the eight in this group who had no previous knowledge of any shorthand system. Previous knowledge of the Stenograph system does not guarantee success either as demonstrated by the one student who failed to reach 200 words per minute.

The writer also attempted to measure the value of foreign languages as indicative of success in machine shorthand. Seven of the thirteen successful students studied

Latin, French, and German. The other six, or approximately 50 percent had no knowledge of a foreign language but this fact did not seem to hinder their achievement in machine shorthand.

The grade received in foreign languages is highly correlated with the student's grade point average. The "B or better" group earned A's and B's. Grades of "C" were obtained by all students in the "C or lower" group.

Two-thirds of the unsuccessful group (16 of 24) studied French, Latin, or Spanish in high school. With two exceptions, C's and D's were earned by all of the students whose grade point averages were "C or lower." The one "A" in Spanish went to a boy of Spanish descent. The "B" was earned by a girl who was majoring in two languages--Spanish and Latin.

The writer would like to call attention to the last student illustrated in Table V. This girl with the lowest GPA of 2.18 has been the outstanding court reporting student at KTI. Guidance counselors say her phenomenal success is due to the fact that she was an "underachiever" in high

French, Latin, or Spanish in high school. With two exceptions, C's and D's were earned by all of the students whose grade point averages were "C or lower." The one "A" in Spanish went to a boy of Spanish descent. The "B" was earned by a girl who was majoring in two languages--Spanish and Latin.

The writer would like to call attention to the last student illustrated in Table V. This girl with the lowest GPA of 2.18 has been the outstanding court reporting student at KTI. Guidance counselors say her phenomenal success is due to the fact that she was an "underachiever" in high school. Her I.Q. of 121 indicates above-average potential but her high school record does not. Her only "A" grade was earned for achieving 150 words per minute in Gregg shorthand. Eleven months after starting machine shorthand, she had reached the 200 wpm speed requirement on two-voice testimony. She passed all three parts of the Certificate of Proficiency exam just thirteen months after enrolling in the Court Reporting Program. Although she obtained only a "B" in

typewriting in high school, her typing speed may have been brought up by working a year in an office before enrolling at KTI where she consistently typed 90 wpm. Her record defies any norms established or confirmed in this study.

For the majority of the students, grades earned in shorthand do not seem to indicate potential success in machine shorthand, nor does shorthand seem to be a prerequisite for learning another system of shorthand as several students without previous knowledge of shorthand were successful.

Grades earned in English are most closely correlated with the student's Grade Point Average. The foreign language grade is, in some instances, one grade point lower than the GPA.

The typewriting grade does not seem to be a reliable predictor of success as evidenced by the large number of A's and B's in the unsuccessful group.

That grade point average seems to be the most reliable predictor is indicated in Table VII. This table summarizes

Grades earned in English are most closely correlated with the student's Grade Point Average. The foreign language grade is, in some instances, one grade point lower than the GPA.

The typewriting grade does not seem to be a reliable predictor of success as evidenced by the large number of A's and B's in the unsuccessful group.

That grade point average seems to be the most reliable predictor is indicated in Table VII. This table summarizes the number of successful and unsuccessful students in each group at Kenosha Technical Institute and Spencerian Business College. Then Table VII illustrates the group and total percents of successful and unsuccessful students at each school in the four major categories:

1. Successful "B or better" high school GPA
2. Successful "C or lower" high school GPA
3. Unsuccessful "B or better" high school GPA
4. Unsuccessful "C or lower" high school GPA

TABLE VII

PERCENT OF SUCCESSFUL AND UNSUCCESSFUL STUDENTS BASED ON GRADE POINT AVERAGE IN MAJOR CATEGORIES AT SPENCERIAN BUSINESS SHA TECHNICAL INSTITUTE FROM 1963 - 1968

Percent Group	L			UNSUCCESSFUL		
	Percent of Total	Number	Percent of Group	Percent of Total	Percent of Group	Percent of Total
69	24.3	6	25	16.2		
31	10.8	18	75	48.6		
100	35.1	24	100	64.8		
65	37.8	7	37	15.6		
35	20.0	12	63	26.7		
100	57.8	19	100	42.3		

g Program
ing Program

The percentages comparing performance within each group show that 69 percent or more than twice the number of students with "B or better" averages were successful as compared to the unsuccessful or 31 percent group at Kenosha. In the unsuccessful group, 75 percent of the "C or lower" group or three times the number in the "B or better" group failed to reach 200 words per minute.

A comparison of percentages for the total group at Kenosha shows that 48.6 percent or twice as many students in the "C or lower" group failed to attain 200 words per minute than in the "B or better" group which comprised 24.3 percent. Nearly five times as many students in the "C or lower" group, (48.6%) failed the course than were successful (10.8%) at this low level.

In the unsuccessful group, exactly three times or 48.6 percent of the students with grade point averages below "B" failed the course as compared to 16.2 percent of the failures who had "B or better" averages.

A comparison of group percentages for students at

Kenosha shows that 48.6 percent or twice as many students in the "C or lower" group failed to attain 200 words per minute than in the "B or better" group which comprised 24.3 percent. Nearly five times as many students in the "C or lower" group, (48.6%) failed the course than were successful (10.8%) at this low level.

In the unsuccessful group, exactly three times or 48.6 percent of the students with grade point averages below "B" failed the course as compared to 16.2 percent of the failures who had "B or better" averages.

A comparison of group percentages for students at Spencerian Business College indicates that almost twice the number of "B or better" students (65%) attained 200 words per minute as compared to the number of "C or lower" students who completed the course (35%). The number of failures in the "C or lower" group was 1.7 times the number in the "B or better" group (63% vs. 37%).

A comparison of the total percentages at Spencerian and Kenosha illustrates the similarities and discrepancies in each school's student achievement.

At Spencerian Business College, less than twice the number of "B or better" students (37.8%) attained 200 words per minute as compared to the number of "C or lower" students (20%) who completed the course. Since the percentage difference is not as great as it was at Kenosha, it indicates that more students of lower caliber are completing the program. This could indicate a relationship exists between the length of the program and its influence on the low-caliber student. Spencerian operates a three-year Court Reporting Program, KTI offers a two-year program.

The spread between the two groups in the unsuccessful category at Spencerian is smaller than at KTI. The percent of "B or better" failures is almost identical to KTI's, but the percent of failures in the "C or lower" group is almost one-half the percent of failures at KTI. Again, the additional semesters of study and time allotted for the attainment of 200 words per minute could be the contributing factor.

High School GPA and Specific Course Grades of

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The spread between the two groups in the unsuccessful category at Spencerian is smaller than at KTI. The percent of "B or better" failures is almost identical to KTI's, but the percent of failures in the "C or lower" group is almost one-half the percent of failures at KTI. Again, the additional semesters of study and time allotted for the attainment of 200 words per minute could be the contributing factor.

High School GPA and Specific Course Grades of
Spencerian Business College Graduates

Other similarities and discrepancies between each school's student body can be noted by a careful analysis of the individual student records at Spencerian. Table VIII presents the records of successful students at Spencerian, and Table IX presents the individual records of unsuccessful students at Spencerian.

Both Tables point out the close relationship of the English grade with the Grade Point Average.

included in Table VIII were able to achieve 200 wpm in six semesters or less.

There was one male in the "C or lower" group of failures. He had not taken either typewriting or shorthand in high school. Three other men in the Court Reporting Program at Spencerian between 1965 and 1968 had to be eliminated from the study because of incomplete high school transcripts. Two of these men were successful.

Age Factor

The writer attempted to determine the best age for achieving success in the Court Reporting Program. Table X shows the number of successful and unsuccessful enrollees in each age group at Kenosha Technical Institute and Spencerian Business College.

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TABLE X

AGE OF STUDENTS AT THE TIME OF ENROLLMENT IN THE COURT AND CONFERENCE REPORTING PROGRAMS WHO HAVE ATTENDED SCHOOL BETWEEN THE YEARS 1965 - 1968.

Age	17-18	19-20	21-29	30-39	40+	School
Successful (200 wpm)	10	3	0	0	0	Kenosha Spencerian
	23	6	3	0	0	
Unsuccessful (less than 200 wpm)	20	4	1	3	3	Kenosha Spencerian
	13	8	2	0	0	
TOTAL	66	21	6	3	3	99

Kenosha had twice as many failures in the 17-18 age bracket, but Spencerian had more successes in this young age group. The ratio of success for the 19-20 age groups was 3:4 at both schools. The latter group involves those students who attended college or had one year's work experience before enrolling in post high. Kenosha was the only school having students above 30 years. None of these older students were successful in attaining 200 words per minute.

Table XI presents the combined number and percent of successful and unsuccessful students in each age group at both schools. The total number and percent of students in each age group in relation to 99 students involved in the age factor are listed in the right-hand columns.

TABLE XI

COMBINED NUMBER AND PERCENT OF SUCCESSFUL AND UNSUCCESSFUL STUDENTS IN EACH AGE GROUP AT BOTH SCHOOLS AND TOTAL NUMBER AND PERCENT OF STUDENTS IN EACH AGE GROUP BASED ON NINETY-NINE.

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TABLE XI

COMBINED NUMBER AND PERCENT OF SUCCESSFUL AND UNSUCCESSFUL STUDENTS IN EACH AGE GROUP AT BOTH SCHOOLS AND TOTAL NUMBER AND PERCENT OF STUDENTS IN EACH AGE GROUP BASED ON NINETY-NINE.

Age	Successful		Unsuccessful		Total	
	No.	Percent	No.	Percent	No.	Percent
17-18	33	50.0	33	50.0	66	66.7
19-20	9	42.9	12	57.1	21	21.2
21-29	3	50.0	3	50.0	6	6.1
30-39	0	----	3	100.0	3	3.0
40+	0	----	3	100.0	3	3.0

Table XI shows that most students up to age thirty have a fifty-fifty chance of succeeding in court reporting. After age thirty, the chances of failure are enhanced according to the chart, but the small number of students in this group cannot be considered significant evidence on which to generalize for all students. All of these older students were housewives whose family responsibilities kept them from devoting as much time as is necessary to practice on the Stenograph. But four of the older childless women who came back for an additional year of speed building and repeated the two-voice testimony course still could not attain 200 wpm.

B. Prognosis for Students Currently Enrolled in
the Court Reporting Programs at Kenosha and
Spencerian

Based on the findings of the past graduates' success as correlated with age at the start of the course, Intelligence Quotient, and Grade Point Average, the writer attempted to predict the future success or failure of the sixteen students

devoting as much time as is necessary to practice on the Stenograph. But four of the older childless women who came back for an additional year of speed building and repeated the two-voice testimony course still could not attain 200 wpm.

B. Prognosis for Students Currently Enrolled in the Court Reporting Programs at Kenosha and Spencerian

Based on the findings of the past graduates' success as correlated with age at the start of the course, Intelligence Quotient, and Grade Point Average, the writer attempted to predict the future success or failure of the sixteen students currently enrolled at Kenosha Technical Institute and the thirty-four students currently studying Court Reporting at Spencerian Business College. Three Spencerian students' records were incomplete regarding high school GPA but the I.Q.'s of these three people are included in Table XII.

Since Table XI indicated that students up to age thirty had a fifty-fifty chance of succeeding, the age factor was not considered unless the student was a borderline case and past age thirty.

Table IV on page 66 illustrated that students above a minimum I.Q. of 100 could succeed or fail; therefore, predictions were not based on I.Q.'s. The writer used I.Q. only as a secondary factor.

The primary factors for arranging the students in the four major categories were:

1. high school grade point average
2. current grade point average at KTI or Spencerian
3. grade received in last-completed semester of machine shorthand (should be "B" or better)
4. teacher opinion of student's potential

Each one of these factors was weighted differently at the respective schools because the writer worked closely with the students at KTI but had no personal knowledge of the students' potential at Spencerian.

I.Q. Factor of Current Students

Weighing the four points listed on the preceding page, the writer selected at each school students who would succeed and who would fail in Court Reporting. I.Q.'s for these

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3. grade received in last-completed semester of machine shorthand (should be "B" or better)
4. teacher opinion of student's potential

Each one of these factors was weighted differently at the respective schools because the writer worked closely with the students at KTI but had no personal knowledge of the students' potential at Spencerian.

I.Q. Factor of Current Students

Weighing the four points listed on the preceding page, the writer selected at each school students who would succeed and who would fail in Court Reporting. I.Q.'s for these students were then plotted and arranged in Table XII.

Table XII was then compared to Table IV which illustrated the I.Q.'s of past successful and unsuccessful students to test the reliability of the prediction table.

The I.Q. range is even greater for the present students at Spencerian than it had been for past graduates but the mean and median scores of 115 at Kenosha and 113 at Spencerian have not changed. (This fact might never happen in another comparison study.)

In comparing the mean and median of the predicted failures with past unsuccessful students, the mean I.Q. has dropped from 114 to 111, and the median I.Q. has dropped from 114 to 108 at Kenosha. At Spencerian the mean I.Q. has dropped from 111 to 105, and the median I.Q. has dropped from 107 to 102.

A word of caution: Table XII is strictly a prediction table against which actual results cannot yet be measured. The lower mean and median I.Q. scores at both schools may account for the built-in optimism of both teachers and program chairmen who tried to help the writer evaluate each student's progress and potential. At the time of graduation the mean and median I.Q. scores may be more closely related. Then the students will have determined for themselves whether or not 200 wpm was attainable. The writer assumes that several of the students for whom success is now predicted will not complete the course. They will drop out of school to be married, obtain full-time employment, or switch to another

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Prognosis for KTI Court Reporting Students

Remember, I.Q. was not used as the determining factor in predicting success. Instead, the following tables based on high school grade point averages were used as the decisive factors.

All students were arranged into four major categories:

TABLE XII

I.Q. RANGES OF KENOSHA TECHNICAL INSTITUTE
AND SPENCERIAN BUSINESS COLLEGE STUDENTS
PRESENTLY ENROLLED IN THE COURT AND CONFERENCE
REPORTING PROGRAMS

Intelligence Quotients of students who will attain 200 wpm and complete the program successfully.		Intelligence Quotients of those students who are predicted not to achieve 200 wpm.	
Kenosha	Spencerian	Kenosha	Spencerian
128	142	130	136
125	126	129	107
121	119	114	102
117	117	101	99
115	117	97	94
111	116	93	93
111	114		
111	113		
106	111		
104	110		
	105		
	105		
	104		
	101		
	100		
115	113	Mean	111
115	113	Median	114
			107
			102

128
125
121
117
115
111
111
111
106
104

142
126
119
117
117
116
114
113
111
110
105
105
104
101
100

130
129
114
101
97
93

136
107
102
99
94
93

115	113	Mean	111	107
115	113	Median	114	102

I.Q. Ranges of Previous Court Reporting
Students at Kenosha and Spencerian

131	130		138	138
105	102	Range	93	96
115	113	Mean	114	111
115	113	Median	108	107

V. SUMMARY, CONCLUSIONS, RECOMMENDATIONS

A. Summary

This study is an attempt to determine if there are criteria with which one can predict achievement in the rigorous Court Reporting Programs at Spencerian Business College and Kenosha Technical Institute so that guidance could be given to enrollees that might result in a lower percentage of dropouts from this intensive program.

The data tabulated in this study were determined by studying the high school transcripts of 44 students enrolled in the Court and Conference Reporting Programs at Kenosha Technical Institute and 55 students enrolled at Spencerian Business College from September, 1963, to June, 1968. Some high school transcripts were incomplete; that is, the GPA was available but not the I.Q. However, the age at the start of the course could be determined for the total group

College and Kenosha Technical Institute so that guidance could be given to enrollees that might result in a lower percentage of dropouts from this intensive program.

The data tabulated in this study were determined by studying the high school transcripts of 44 students enrolled in the Court and Conference Reporting Programs at Kenosha Technical Institute and 55 students enrolled at Spencerian Business College from September, 1963, to June, 1968. Some high school transcripts were incomplete; that is, the GPA was available but not the I.Q. However, the age at the start of the course could be determined for the total group of 99 students.

The writer attempted to correlate age at the time of enrollment in the program; the student's I.Q. and high school grade point average; English, typewriting, shorthand, and foreign language grades with the student's achievement in the Court Reporting Programs.

The writer based this study on the assumption that only "B or better" students would attain 200 words per minute on

two-voice testimony, which is the culminating course in the Court Reporting Program. It was thought that students who had a "C or lower" high school grade point average would not be successful in this rigorous program.

For purposes of comparison, the students were arranged into four major categories according to their grade point average in high school. The categories were:

1.	Successful	B or better	high school	GPA
2.	Successful	C or lower	"	"
3.	Unsuccessful	B or better	"	"
4.	Unsuccessful	C or lower	"	"

Students were classified as being either "Successful" or "Unsuccessful." "Success" was defined as the ability to achieve 200 words per minute on two-voice testimony (that is, one person reads the lawyer's questions, and another person reads the witness's answers) which is the terminal course in the Court Reporting Program. Attaining this high degree of skill is comparable to running the four-minute mile. Not

1.	Successful	B or better	high school GPA		
2.	Successful	C or lower	"	"	"
3.	Unsuccessful	B or better	"	"	"
4.	Unsuccessful	C or lower	"	"	"

Students were classified as being either "Successful" or "Unsuccessful." "Success" was defined as the ability to achieve 200 words per minute on two-voice testimony (that is, one person reads the lawyer's questions, and another person reads the witness's answers) which is the terminal course in the Court Reporting Program. Attaining this high degree of skill is comparable to running the four-minute mile. Not many people are capable of achieving this high degree of excellence. The term "Unsuccessful" was applied to anyone who did not attain 200 words per minute on two-voice testimony even though he may have completed the course at a lower speed. This term is not meant to imply failure. Any student who achieves 120-160 wpm can hardly be considered a failure. He would be considered very successful in any other program whose standards were not as high as 200 wpm. The "Unsuccessful" group also included the students who dropped out of the program before the final semester. Some of these dropouts were

doing very well but left school to be married, obtain full-time employment, or care for a family. Others just lost interest in a court reporting career.

The writer determined that age at the start of the course is not a factor in predicting success. Up to age thirty, students have a 50-50 chance of succeeding but the chance of failure is increased beyond age thirty. Some of these older women had too many time-consuming family responsibilities which kept them from practicing. But other childless women in this age bracket who came back for a third year of additional speed-building and repeated the two-voice testimony course were not able to attain 200 words per minute.

I.Q. was found to be of little value in predicting success. I.Q.'s ranged from a high of 131 to a low of 102 for the successful students. The four highest I.Q.'s were in the unsuccessful group which ranged from a high of 138 to a low of 93. Both the mean and median I.Q. scores at Kenosha Technical Institute were 115. At Spencerian Business College, the mean

women had too many time-consuming family responsibilities which kept them from practicing. But other childless women in this age bracket who came back for a third year of additional speed-building and repeated the two-voice testimony course were not able to attain 200 words per minute.

I.Q. was found to be of little value in predicting success. I.Q.'s ranged from a high of 131 to a low of 102 for the successful students. The four highest I.Q.'s were in the unsuccessful group which ranged from a high of 138 to a low of 93. Both the mean and median I.Q. scores at Kenosha Technical Institute were 115. At Spencerian Business College, the mean and median I.Q. scores were 113 for the successful group. The average I.Q. of the failures was 114 at Kenosha and 111 at Spencerian which is very close to the mean I.Q. for the successful students. The lower median scores of 108 at Kenosha and 107 at Spencerian in the unsuccessful groups indicates a majority of lower-caliber students in this group. No one with an I.Q. below 100 was successful in reaching 200 wpm.

In correlating the high school grade point averages with the records of past success or failure of graduates in the

Court Reporting Program, the writer determined that a close correlation exists between the student's high school grade point average and his senior English grade. In the majority of cases, these two items were identical. Therefore, the English grade can be used as a reliable predictor of Stenograph success if the grade point average is not available.

The grade earned in foreign languages also seems to be closely related to the GPA but there is no relationship between the language studied and success on the Stenograph. Latin, French, and Spanish were the languages most frequently studied. Whether or not the student knew any foreign language did not seem to affect his Stenograph ability either. A large number of unsuccessful students studied a foreign language in high school but did not achieve 200 wpm, whereas several students who had not studied any foreign language in high school achieved 200 wpm on two-voice testimony.

An analysis of the typewriting grade showed that it was totally unrelated to the high school GPA and that while the

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An analysis of the typewriting grade showed that it was totally unrelated to the high school GPA and that while the majority of successful students were good typists in high school, many unsuccessful students were just as good but typing did not help them manipulate the Stenograph keyboard. From personal observation, the author still believes typing ability and Stenograph success are related.

Previous shorthand instruction is not essential for success on the Stenograph as students without high school shorthand were just as successful on the Stenograph as others whose background

included Notehand, Gregg or Machine Shorthand. The grade received in high school shorthand class was totally unrelated to success on the Stenograph.

The most significant factor used to predict Stenograph success was the high school grade point average. The writer assumed that students would need a "B or better" average to achieve 200 wpm in two-voice testimony in two years. This assumption was substantiated at both schools, especially at Kenosha where 24.3 percent of the "B or better" group was successful as compared to only 10.8 percent of the "C or lower" group. The spread in percentage points at Spencerian was smaller but still substantial. There 37.8 percent in the "B or better" group achieved success as compared to 20 percent in the "C or lower" group. The percent of failures in the "B or better" group at both schools was almost identical. At KTI, 16.2 percent failed, while 15.6 percent failed at Spencerian. A significant difference does exist, however, in the number of "C or lower" students who failed to achieve 200 wpm at each school. There were almost twice as many failures at Kenosha

Kenosha where 24.5 percent of the "B or better" group successful as compared to only 10.8 percent of the "C or lower" group. The spread in percentage points at Spencerian was smaller but still substantial. There 37.8 percent in the "B or better" group achieved success as compared to 20 percent in the "C or lower" group. The percent of failures in the "B or better" group at both schools was almost identical. At KTI, 16.2 percent failed, while 15.6 percent failed at Spencerian. A significant difference does exist, however, in the number of "C or lower" students who failed to achieve 200 wpm at each school. There were almost twice as many failures at Kenosha Technical Institute (48.6%) as compared to the number of failures at Spencerian where only 26.7 percent in this group failed. The significant difference may be due to the difference in the length of programs. KTI offers a very intensive two-year course which might be above the "average" students' capability while Spencerian offers a three-year intensive Court Reporting Program.

The data would be more significant if the study involved a larger number of students and post high school programs.

On the basis of the data gleaned from this study, prediction tables were set up to predict the eventual success or failure of students currently enrolled in the Court Reporting Programs at both schools.

Because the study of past graduates indicated that students in almost any age category up to thirty years had a 50-50 chance of succeeding in Court Reporting, the writer did not even consider the age factor for the current predictions except in borderline cases.

The I.Q.'s were charted for the predicted successful and unsuccessful students. The mean I.Q. at both schools for the successful group was identical to the average I.Q. of past graduates at their respective schools. However, the median scores were lower which could account for some built-in optimism in the teacher's evaluation of each student's potential for success. One year from now, after several students who are now included in the successful group have left the Court Reporting Program to be married, to accept a full-time job, or for lack of interest, the median scores will be more closely

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For making the predictions of the current students' success, the writer did not rely on the student's high school grade point average or English grade solely to predict success. In addition, the student's current GPA at his post high school, his grade in the most recently completed semester of shorthand, and his teacher's opinion of his potential success were weighted very heavily with his high school grade point average. The age and I.Q.

factors were used only in marginal cases. The individual's grades in English, typewriting, shorthand, and a foreign language were studied very carefully too. The accuracy of these predictions cannot be measured at the present time.

B. Conclusions

In reviewing the findings of the study, it is apparent that Stenograph success as related to the field of Court Reporting is difficult to predict. There are so many intangible factors such as interest in Court Reporting, desire to achieve, good work habits, and ability to discipline oneself to practice which influence the degree of success achieved.

Because some people were rated as "Unsuccessful" in Court Reporting, it does not mean that they were incompetent. Most of these people were very competent on the Stenograph but they dropped out of the program for a variety of reasons. Some left school to be married, to care for a family, for medical reasons,

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This study showed that high school grade point average is a significant factor in predicting the success of machine shorthand students. The relationship of GPA to success would seem to indicate that students who have done a good job of studying in high school carry these good work habits on to college and continue to achieve successfully.

Other facts gathered from the study indicate:

1. Age is not a factor in predicting success but no student in this study above age thirty attained 200 wpm on the Stenograph in two-voice testimony.
2. I.Q. cannot be used as a determining factor of success. The average I.Q. of the successful and unsuccessful groups at both schools showed only a two-point variance, but the median score was lower for the unsuccessful groups.
3. No one with an I.Q. below 100 was able to reach 200 wpm.
4. There is a high correlation between the student's high school GPA and his English grade, therefore, the English grade can be considered indicative of potential success on the Stenograph and can be used to predict success if the grade point average is not available.
5. The foreign language grade cannot be used as a prerequisite for success in learning machine shorthand because
 - a. Both students who had or had not studied a foreign language in high school achieved success on the Stenograph.
 - b. Latin, French, and Spanish were studied most frequently but the

4. There is a high correlation between the student's high school GPA and his English grade, therefore, the English grade can be considered indicative of potential success on the Stenograph and can be used to predict success if the grade point average is not available.

5. The foreign language grade cannot be used as a prerequisite for success in learning machine shorthand because

- a. Both students who had or had not studied a foreign language in high school achieved success on the Stenograph.
- b. Latin, French, and Spanish were studied most frequently but the language, itself, had no bearing on predicting success.

The grade received in a foreign language is at times identical to the GPA which is closely correlated to success, but this is just one grade. The GPA is a composite of the student's ability. Furthermore, all students do not elect a foreign language but all students take English and receive a GPA rating for their high school work.

6. The typewriting grade cannot be used to predict success.

- a. High school typewriting grades for the successful and unsuccessful students ranged from "A" through "D"
- b. There was low correlation between the high school GPA and typewriting grade

7. Previous knowledge of a shorthand system is not essential for success on the Stenograph. Students without previous shorthand instruction in high school were able to attain 200 words per minute on two-voice testimony.

8. The grade received in high school shorthand had little bearing on the success on the Stenograph. Both successful and unsuccessful students had received grades ranging from "A" through "D" in high school shorthand.

The factor that seemed to be most closely related to Stenograph prognosis was the student's high school grade point average because the majority of successful students were in

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8. The grade received in high school shorthand had little bearing on the success on the Stenograph. Both successful and unsuccessful students had received grades ranging from "A" through "D" in high school shorthand.

The factor that seemed to be most closely related to Stenograph prognosis was the student's high school grade point average because the majority of successful students were in the "B or better" group and the majority of unsuccessful students were in the "C or lower" group. The grade point average factor was more closely related to predicting "success" at KTI than at Spencerian because of the difference in the length of each school's Court and Conference Reporting Program, and because the writer used the premise that only "B or better" students could achieve 200 wpm on two-voice testimony. Kenosha Technical Institute's intensive Court Reporting Program is very difficult for any "average" student to master in two years. Spencerian offers a three-year program which operates on a

six-semester basis. The fact that Spencerian was able to graduate more students of "average" ability than Kenosha Technical Institute indicates that students of average ability can succeed in Court Reporting but it might take them longer to achieve 200 wpm than it takes their above-average peers.

Due to the imperfect correlation of success and failure to the high school grade point average of "B" or "C" respectively, there must be other factors which influence the student's aptitude for success. Factors such as interest in the program, personal drive, good work habits, and ability to discipline oneself to practice play a tremendous but immeasurable role in predicting success in the Court Reporting field.

The future looks bright for aspiring court reporters because many states are revising their court systems and increasing the number of job opportunities. Recent Supreme Court decisions have also emphasized the need for additional court reporters by saying that all testimony taken in any

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The future looks bright for aspiring court reporters because many states are revising their court systems and increasing the number of job opportunities. Recent Supreme Court decisions have also emphasized the need for additional court reporters by saying that all testimony taken in any court of record must be permanently recorded. Recent reversals and interpretations of past rulings have given prisoners ground on which to appeal their cases thereby creating additional need for court reporters. Due to the fallibility of the tape recorder, there will always be a need for human court reporters.

It will still be necessary for court reporters to attain 200 words per minute to seek gainful employment although transcription may become a thing of the past. Itek Corporation is experimenting with a new electronic hookup which will insure

automatic transcription of the court reporter's notes. Little wires attached to the machine's keys will automatically punch holes in tape. This hole-punched tape will then be fed into the interpreter which will produce a complete transcript.

C. Recommendations

As a result of the findings of this study, it is recommended that more precise correlation tables be established for the criteria used. The next study of similar nature should include ACT (American College Testing Program) and the National Merit Scholarship Qualifying Test scores as another factor on which to predict Stenograph success. The study should be enlarged to include more post high schools offering the Court Reporting Program so that the number involved in the study will be large enough to yield significant data.

On the basis of the findings of this study, the writer recommends that students with I.Q. scores below 100 be discouraged from enrolling in Court Reporting.

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On the basis of the findings of this study, the writer recommends that students with I.Q. scores below 100 be discouraged from enrolling in Court Reporting.

Guidance counselors should consider the high school grade point average of "B or better" as indicative of potential success in the Court Reporting Program. Since the majority of students with high school grade point averages of "C or lower" took longer than two years to complete the course, but demonstrated that with perservance they could eventually succeed, guidance personnel and teachers should

caution future enrollees with "C" averages not to become discouraged because they, too, can be successful but it may take additional time and study to achieve 200 words per minute. This advice might cut down the large number of dropouts.

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