University of Northern Iowa UNI ScholarWorks

**Graduate Research Papers** 

Student Work

1973

# A survey of the reading habits, library usage, subject preferences, and achievement test scores of the ninth and eleventh graders in the Colo Community School

Arleyne M. Gildersleeve University of Northern Iowa

Let us know how access to this document benefits you

Copyright ©1973 Arleyne M. Gildersleeve

Follow this and additional works at: https://scholarworks.uni.edu/grp

Part of the Library and Information Science Commons

## **Recommended Citation**

Gildersleeve, Arleyne M., "A survey of the reading habits, library usage, subject preferences, and achievement test scores of the ninth and eleventh graders in the Colo Community School" (1973). *Graduate Research Papers*. 2843.

https://scholarworks.uni.edu/grp/2843

This Open Access Graduate Research Paper is brought to you for free and open access by the Student Work at UNI ScholarWorks. It has been accepted for inclusion in Graduate Research Papers by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Offensive Materials Statement: Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

# A survey of the reading habits, library usage, subject preferences, and achievement test scores of the ninth and eleventh graders in the Colo Community School

# Find Additional Related Research in UNI ScholarWorks

To find related research in UNI ScholarWorks, go to the collection of School Library Studies Graduate Research Papers written by students in the Division of School Library Studies, Department of Curriculum and Instruction, College of Education, at the University of Northern Iowa.

# Abstract

This study is a survey of the library o£ the Colo Junior-Senior High School, Colo, Iowa, during the 1972-1973 school year. It is limited to a strictly local situation, and the information secured and analyzed will be used primarily as a guide in planning future library programs in this particular situation. No attempt was made to do a statistical analysis or correlation. Rather. the conclusions show general trends and areas of weakness and strength. Faults are apparent in the questionnaire, and as always, student responses may or may not be conscientiously given. However, it is hoped that the paper will have some value in its own particular area.

A SURVEY OF THE READING HABITS, LIBRARY USAGE, SUBJECT PREFERENCES, AND ACHIEVEMENT TEST SCORES OF THE NINTH AND ELEVENTH GRADERS IN THE COLO COMMUNITY SCHOOL

> A Research Paper Presented to the

Faculty of the Library Science Department

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Arleyne M. Gildersleeve

July 1973

### A SURVEY OF THE READING HABITS, LIBRARY USAGE, SUBJECT PREFERENCES, AND ACHIEVEMENT TEST SCORES OF THE NINTH AND ELEVENTH GRADERS IN THE COLO COMMUNITY SCHOOL

A Research Paper

Presented to the

Faculty of the Library Science Department

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

Arleyne M. Gildersleeve

July 2, 1973

Read and approved by

Elizabeth Martin\_\_\_\_\_ Mary Lou MCrew\_\_\_\_ Accepted by Department Elizabeth Martin

Date Galy 10, 1973

# TABLE OF CONTENTS

			page
1.	Intro	duction	4
2.	0bjec	tives of the Study	4
3.	Metho	d Followed	5
4.	Discu	assion of ITED Scores	5
5•	Discu	assion of Questionnaire Responses	10
6.	Concl	usions	22
7.	Appen	dixes	
	A.	Library Questionnaire	26
	B.	Codes	29
	C.	Favorite Books	30
	D.	Freshman Class ITED Scores	32
	E.	Junior Class ITED Scores	33

1

١

#### INTRODUCTION

This study is a survey of the library of the Colo Junior-Senior High School, Colo, Iowa, during the 1972-1973 school year. It is limited to a strictly local situation, and the information secured and analyzed will be used primarily as a guide in planning future library programs in this particular situation. No attempt was made to do a statistical analysis or correlation. Rather, the conclusions show general trends and areas of weakness and strength. Faults are apparent in the questionnaire, and as always, student responses may or may not be conscientiously given. However, it is hoped that the paper will have some value in its own particular area.

#### OBJECTIVES OF THE STUDY

The objectives of this research paper are:

- 1. to test the value of Iowa Tests of Educational Development scores as an index of actual student use of the library
- 2. to test whether the composite Iowa Tests of Educational Development scores allow a prediction of the development of library skills
- 3. to provide a basis for planning future teaching of library skills
- 4. to provide a basis for determining which types of reading need to be encouraged
- 5. to help determine which areas of the library holdings need to be strengthened on the basis of student interest
- 6. to determine if there is a relationship between the number of years spent in this school and the use of the library
- 7. to establish a basis for possible future investigations concerning Iowa Tests of Educational Development scores and library use in similar schools

#### METHOD FOLLOWED

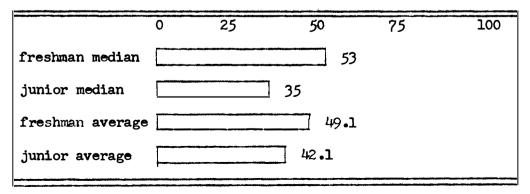
- 1. to formulate the questionnaire to be administered to the freshman and junior classes
- 2. to tabulate the responses to the questionnaire
- 3. to tabulate Iowa Tests of Educational Development scores from the tests given to the freshman and junior classes during the current school year
- 4. to discuss the results of those scores
- 5. to discuss the responses to the questionnaire, using graphs and charts where desirable
- 6. to draw conclusions from both sets of information
- 7. to consider what implications are contained in these conclusions for:
  - a. the library program
  - b. the classroom instructional program
  - c. the future of the Colo Community School

#### DISCUSSION OF ITED SCORES

First, the Iowa Tests of Educational Development (ITED) scores will be considered. The freshman scores are considerably higher than the junior scores:

#### Figure 1

#### ITED Summary Scores



The highest freshman composite score is 95, and the highest junior score is 88, while the lowest freshman score is 1, and the lowest junior score is 4.

As to individual categories, these are the high scores for each class:

#### Figure 2

High Individual Scores

	Corr. Expr.	Quant. Think.			Lit. Mat.		Sources of Inf.	Comp.	Read.
Freshmen:	94	90	93	96	98	95	96	95	95
Juniors:	97	88	88	81	92	80	82	88	82

In only one category, correctness of expression, is the high junior higher than the high freshman.

As to the category in which each class ranks highest, the freshmen are highest in social studies (56.7) and the juniors are highest in literary materials (50.5). General vocabulary, literary materials, and sources of information are close runners-up in the freshman class, while in the junior class there is a larger gap between the top and the runner-up, social studies.

The freshman class low is in quantitative thinking (36.3), with natural science a close second (36.8). The junior class low is in natural science (34.1), with quantitative thinking next low (38.4). It seems inescapable that science and mathematics are two weak areas in the curriculum. It has often been assumed that boys have more interest and aptitude in science and mathematics than girls have. In this case, the freshman girls' highest score is in sources of information (72.9), with a great drop to 38.9 in natural science. Quantitative thinking is also low at 40.4. The freshman boys' high is rather a surprise, general vocabulary at 46.6, and their low is quantitative thinking (32.7), with natural science next lowest at 35.0. So the freshman girls are higher than the freshman boys in both quantitative thinking and natural science, but both boys and girls rank lowest in these two areas.

The junior girls' high is literary materials (58.6), and their low is in quantitative thinking (37.2), with natural science very close at 37.6. The junior boys' high is also literary material (45.8), with natural science low (32.1) and correctness of expression next (34.3). The only ranking in mathematics and science which is higher than the eighth or ninth rankings is quantitative thinking for the junior boys, with 41.1. This is not very conclusive proof that the boys in these particular classes outshine the girls very greatly in these two areas.

In examining the highest areas a little more closely, the high ranking of literary materials (first for all juniors, and third for all freshmen) plus general vocabulary high for freshman boys probably reflects the influence of a strict, conscientious, well-informed language arts teacher who has taught at all secondary levels at various times, and who has held this position for seventeen years. The students may not really <u>like</u> language arts, but they do <u>learn</u> it. And the preference for literature over other phases of English is reflected in these scores. This teacher teaches grammar very thoroughly, but has difficulty overcoming faulty habits which students have learned in the home. Also, knowing the situation in this school, there have been years when a particular class has suffered from poor teaching, and this is probably reflected in lower scores for an entire class.

Rankings are of interest in the general vocabulary category. Highest are the freshman girls, and lowest, the junior girls:

freshman girls	67
freshman boys	46•6
junior boys	42.9
junior girls	40

It is hoped that this is a trend toward more vocabulary training as the younger classes progress through the system.

Reading totals show freshman girls again at the top, but the other rankings differ:

freshman girls	64•6
junior girls	52•4
junior boys	40.4
freshman boys	38.7

Possible reasons here may be that the attention span of the boys is usually shorter than that of the girls, and the boys appear to have more difficulty in interpreting questions. Also, the girls do more reading, according to their questionnaire responses.

In examining social studies scores, again freshman girls are considerably higher than other groups:

freshman girls	69 <b>•5</b>
junior girls	47•7
freshman boys	46.0
junior boys	43•3

Apparently the social studies teaching is more nearly adequate than the mathematics and natural science teaching, and shows about the same educational levels as language arts.

The scores on sources of information hopefully reflect somewhat the emphasis which has been placed on upgrading library materials and services since 1970. The freshman class score is 54.5, and the junior class score is 43.4. These are not high enough yet, but perhaps as the junior high classes move into high school, there will be further improvement.

One result of this research which is interesting is that the freshman girls are consistently higher than other groupings. The scores are not outstanding, but are at least encouraging compared to the others. In only one category did the freshman boys, the junior girls, or the junior boys exceed the freshman girls' score, and that was .7 of a point higher in quantitative thinking by the junior boys.

Note should be made here that the validity of ITED scores has been questioned in recent years by many professional school persons. It is difficult to ascertain whether or not students actually try to answer correctly. At times a pattern of responses is noted which indicates random answers rather than considered ones. In this respect, girls are usually more conscientious than boys, and are also usually better in clerical skills, so perhaps the boys are actually more capable than might be assumed from the scores.

In summarizing this analysis of the ITED scores, it must be repeated that instruction definitely needs improvement in quantitative thinking and in natural sciences. Correctness of expression also appears weak, and all faculty members should strive for improvement in this area, not just the language arts teachers. The turnover of staff members in this school has hurt instruction. It is difficult to maintain any continuity when many instructors and administrators stay one or two years and then leave. Perhaps the answer will be in reorganization, although that is an unpopular concept. At any rate, it would seem that the taxpayers should be concerned with getting a little more return for their tax dollars which go to public education.

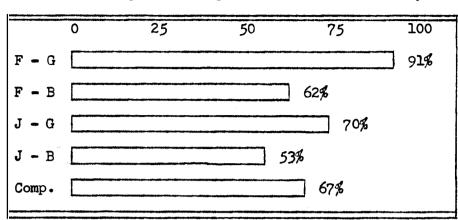
#### DISCUSSION OF QUESTIONNAIRE RESPONSES

It was hoped that the question concerning educational history might help to determine the quality of education in this school as compared to other schools attended. However, few of the students have actually attended other schools for any great length of time. 67 percent of the students have attended the Colo schools exclusively. Of those who have attended other schools, nearly two thirds have spent over one half of their school lives in Colo, so it would appear that the family locations are rather stable. As might be expected, the freshmen have a higher percentage who have attended Colo exclusively (75) than do the juniors (59). It will be noted throughout the research that the freshman girls tend to give similar responses, and perhaps one reason would be that 91 percent of them have attended school together since kindergarten.

The graph indicates the percentage of each grouping which has attended the Colo schools exclusively:

10



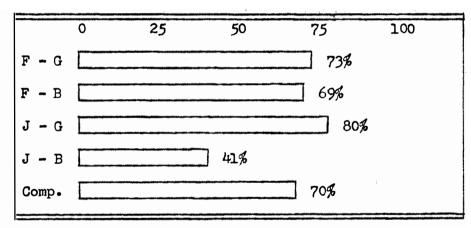


Percentage Attending Colo Schools Exclusively

The boys in each class indicated more use of the library than did the girls, and juniors use it more often than freshmen, both boys and girls. The total of 82 percent who responded that they used the library often is a respectably high figure. Injecting a non-scientific reason here, it would seem from observation that the boys as a whole are less concerned with class assignments than are the girls, and thus appear to have more time to spend reading magazines in the library.

Responses concerning the purpose of library usage reveal a significant difference between the freshman and junior classes. 75 percent of the freshmen use the library resources primarily for recreational reading, while only 41 percent of the juniors do. Again from observation it would seem that the freshman class has more "readers" than does the junior class, and this is indicated by their responses. Another possibility is that the junior class instructors require more library usage in their assignments, and again, this appears to be the case. The widest variation here is that between the freshman girls (90%) and the junior girls (30%) in recreational reading. The degree of confidence in their ability to find library material is especially gratifying to a librarian. While the responses reveal some weaknesses, 70 percent of the 51 subjects feel that they can usually find what they want in the library. The freshmen feel more confidence than do the juniors, and it is hoped that this higher degree of confidence reflects the concentration of library instruction in junior high school which has been initiated recently in the Colo school. The graph indicates the percentages who feel that they can usually find needed materials:

#### Figure 4



Percentages Able to Find Material

The item concerning paperbacks and hardbacks provided some surprises. So many paperbacks are checked out that it is assumed that this is a paperback generation. The percentages do indicate that 63 percent of the students prefer paperbacks, but this is not exactly an overwhelming majority. There was quite a marked difference between the freshmen and juniors, with 75 percent of the freshmen preferring paperbacks, and only 52 percent of the juniors. It is interesting to speculate as to whether the juniors have gotten past the stage of trying to prove that they are "with it," or perhaps they are tired of paperbacks falling apart, or whether more of the titles which they prefer are found in hardback editions. In both classes, a higher percentage of boys preferred paperbacks than girls, 77 percent to 73 percent in the freshman class, and 59 percent to 40 percent in the junior class. At any rate, this should indicate that the library still needs to invest in hardback books as well as paperbacks.

There is one further consideration on this point. The library has a great many permabound books, and there was no distinction made as to paperback, permabound, and hardback. In formulating the questionnaire, it was assumed that paperbacks and permabounds were both considered paperbacks, but it seems probable that the students may have considered the paperbounds as hardbacks, and they are very popular.

The numbers given for books checked out during the first semester have to be very approximate. From observation, the students tend to be non-readers, so it would appear that the responses are rather accurate. The influence of course requirements plays a role here, as students enrolled in individual reading, minority literature, etc., check out more books than those in vocational courses. A possible weakness in the questionnaire may be indicated. The item asked for number of books "checked out" and this does not necessarily mean that the books were read. Many fiction books are checked out and returned if they prove to be dull, and many non-fiction books are used for certain pages or chapters only rather than in their entirety. Again, some popular books may be read by several persons while checked out to only one. The average number of books checked out was seven, with girls checking out more than boys, and freshmen checking out more than juniors. The range is interesting:

freshman girls	3 to 20
freshman boys	l to 60
junior girls	3 to 30
junior boys	0 to 20

The individual highs were fairly consistent except for the one "sixty" in the freshman class, which does not appear to be an exaggeration, since this is a student who checks out two, three, or four books at one time. This same student ranked the highest in vocabulary of the 51 students tested. And incidentally, he has spent only about one year in the Colo schools.

It is difficult to understand how a high school student completes a semester of work without checking out a single book. Perhaps assignments can be completed in the library, and perhaps the student has access to a set of encyclopedias at home. This is the extent of reference work required in some classes.

Many more freshmen than juniors were able to name a favorite book, 88 percent compared to 56 percent. Again the girls led the boys in both classes. The freshman girls' choices proved what can be observed, a "chain effect," or checking out of a favorite book by most of the freshman girls. Joy in the Morning by Betty Smith was named four times. <u>Hot Rod</u> by Felsen was named twice by freshman boys, <u>The Contender</u> by Lipsyte, twice by junior boys, and <u>Black Like Me</u> crossed class divisions to be named by a freshman boy and a junior girl, and <u>The Wild</u> <u>One</u> by Cassidy was named by a freshman boy and a junior boy. The last reflects a well-observed obsession with motorcycles. It is gratifying to see some indication of more sophisticated tastes in some cases than were shown two years ago when the library program was first seriously organized. Steinbeck, Gunther, Borland, Orwell, Potok, and Jackson show quite respectable interests in reading. It is also gratifying to find that books which have been recommended to students are sometimes listed as favorites. Many of the titles named reflect the emphasis placed on minority literature by the language arts department during this school year.

Surprisingly, the preference for fiction and non-fiction was quite evenly divided, with the overall preference being for fiction, 55 percent to 45 percent. Only the junior boys preferred non-fiction. Possibly this could be because of the interest in cars and motorcycles, and the devouring of magazines and books dealing with these topics. The breakdown showing percentages preferring fiction is shown in this listing:

freshman girls	64%
freshman boys	54%
junior girls	60%
junior boys	47%
composite	55%

The findings concerning reading likes and dislikes are important both for the library and for the language arts department. As expected, the reading of stories is the big leader in the poetry-drama-essaysstories category. These preferences for the combined freshman and junior classes are shown:

stories	96%
drama	47%
essays	45%
poetry	17%

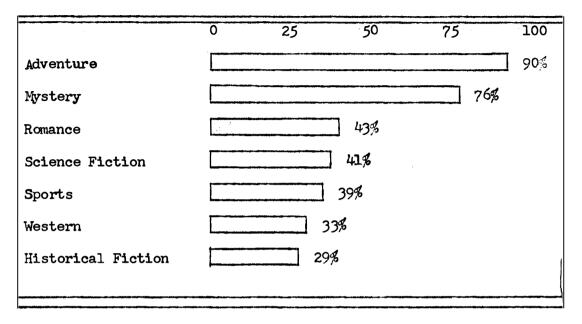
15

The high percentage for drama is surprising, but again there are local circumstances which provide an explanation. A very popular instructor and a very popular program in dramatics may have influenced this response. Colo is offering a course in "Introduction to Drama" and one in "Stagecraft," and there are many stage-struck students. It seems likely that it is this phase of the language arts department course offerings which is popular rather than simply the reading of drama. The relatively high response for essays may show some confusion as to what constitutes an essay. Possibly this classification should not have been included in the fiction category. The low esteem for poetry (17%) could have been predicted. While all responses for poetry were low, the girls liked it better than the boys, especially the freshman boys, with zero% liking poetry.

To summarize item #11, girls prefer adventure, mysteries, and teen-age romances. Boys prefer adventure, mysteries, sports stories, science fiction, and westerns, showing more diversity of interest than do the girls. Boys gave over 50% approval to five of the seven categories, while girls approved only three categories by over 50%. In comparing the interests of boys and girls in the freshman and junior class, the widest margins were between freshman and junior girls in historical fiction, freshman and junior boys in science fiction, both showing a decrease in interest, and an increase of interest in sports stories from freshman to junior boys. For the students as a whole, the percentages of favorable responses rank this way: (Again, there was no attempt to define these terms, and it is probable that not every student understood the distinctions clearly. The most amusing response was that of the junior boy who embellished his "no" for teen-age romances to make it "no way."



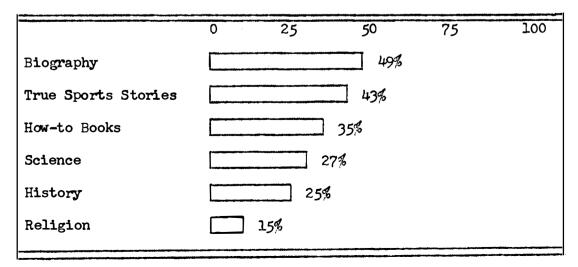
Preferences in Fiction



The likes and dislikes in non-fiction showed less variation than the previous item. The girls preferred biography, history, and religion, while the boys preferred how-to books, science, and true sports stories. In no category, however, did the positive responses total above 50 percent of the students. These were the percentages liking each category:



#### Preferences in Non-Fiction



The highest choice of the girls was biography (62%) and the boys<sup>1</sup> choice was true sports stories (67%). True sports stories ranked lowest with the girls (10%) and religion ranked lowest with the boys (15%). The most significant variations between freshman and junior classes was the increase of interest in history from freshman to junior boys, and the decrease of interest in science from freshman to junior boys.

Positive responses to the item on use of the <u>Abridged Reader's</u> <u>Guide to Periodical Literature</u> show the fairly heavy use of this area of the library. There are insufficient supplementary materials for instructional purposes, so the teachers rely heavily on the library's periodicals. This entails a great deal of time and effort in locating, checking out, and re-filing the periodicals, but it is one of the most satisfactory functions of the library. The students understand the process and appreciate assistance in locating needed articles. The 58% of the freshmen and 74% of the juniors who use this <u>Guide</u>, with an average of 67%, is an indication of satisfactory functioning, especially when the senior class actually makes the most use of periodicals.

Concerning encyclopedia use, there is again a weakness in the questionnaire. It was assumed that the students would be familiar enough with the sets to identify them, but it seems doubtful that this was true. One of two things should have been done: either identify the sets by color on the questionnaire, or display one volume of each set while the questionnaire was administered. This might have eliminated some of the questionable responses received. For instance, it does not seem likely that <u>Encyclopedia Britannica</u> would be the first choice of high school students, and from observation, <u>Encyclopedia International</u> is not used to the extent indicated. The high number of affirmative responses for <u>World Book</u> agree with observation in the library, however. The first and second rankings for the seven sets follow:

#### Figure 7

#### First and Second Place Rankings

#### for Encyclopedias

First		Second		
World Book	32	Grolier	11	
Britannica	6	Americana	10	
Americana	5	World Book	10	
Colliers	4	Colliers	9	
International	3	Britannica	6	
Grolier	l	International	3	
Our Wonderful World	0	Our Wonderful World	2	

The percentages naming <u>World Book</u> as first are 73% of the freshman girls, 82% of the freshman boys, 50% of the junior girls, and 47% of the junior boys. The average for all subjects is 63%. The second place rankings are probably fairly accurate. <u>Colliers</u> is the newest of the seven sets, which may account for its ranking higher than in many other schools. It is difficult to conclude from this item whether <u>World Book</u> should be updated, or the use of more advanced sets encouraged. It is necessary to have <u>World Book</u> because of the combination junior-senior high school at Colo, and it is also easier for the slower students to use. Students should be aware of its limitations, however. The best plan will probably be to update both <u>World Book</u> and the more advanced sets. Some generalizations might be made concerning the preferences in subjects and subject matter. It could have been predicted that the vocational subjects would lead the academic subjects, but the difference may be larger than expected. The reason may be the introduction of an expanded vocational agriculture program by a new, young, and popular instructor, who had a good basic program on which to build. The drastic drop from vocational to non-vocational preferences is shown by this \* graph giving the percentages each subject received for first place:

#### Figure 8



	0	25	50	75	100
Vocational				68%	
Mathematics		14%			
Social Studies		8%			
Science		6%			
English		4%			

By using the 1-2-3-4-5 rankings and averaging them, the overall ranking becomes:

vocational subjects	1.70
mathematics	3.04
social studies	3.32
science	3•34
English	3.56

Note must be made here of the reason for fifty rather than fifty-one subjects responding to this item. One freshman boy refused to use the rankings as requested. His reason was that he hated three of the areas equally and would assign them nothing except "5" ranking. Another interesting point is that although English ranked last, social studies received more "5" ratings than did English, fifteen to thirteen. No freshman or junior boys ranked English first, no freshman boys ranked social studies first, and no freshman boys <u>or</u> girls ranked science first. And in spite of the popularity of vocational subjects, three students gave them "5" ranking.

It is apparent from the above that English is merely endured by most students, but item #16 attempts to define, at least, which areas of the teaching of English are liked most, even if they are not genuinely liked. By averaging the numerical rankings again, this ranking is obtained:

literature	2.22
drama	3.00
spelling	3.18
composition	3•29
grammar	3.71

Again, the interest in the dynamic dramatics program is shown in this listing. The reading of drama in traditional English classes would probably not result in a second place for drama. It should not be surprising for anyone who works with students to find that grammar is a poor fifthplace area of interest.

There are some interesting variations, with the freshman class marking drama high and grammar low, and the junior class marking literature high and grammar low. Boys and girls each ranked literature highest and grammar lowest when scores are tabulated by sex. The highest number of positive responses was ten for literature by junior boys, and the highest number of negative responses was seven for spelling by junior boys.

The final two items were relatively easy to tabulate. Fifteen are usually on the honor roll, and eighteen never, with eleven sometimes and five seldom. Eight girls and seven boys are usually listed on the honor roll, and four girls and fifteen boys say that they are never on the honor roll.

Half of the freshmen and 22 percent of the juniors indicate that they would enroll in the course in speed reading if offered next year, for a total of 35 percent. There is no way to tell if interest, time, previous scheduling, or other reasons influence this response.

#### CONCLUSIONS

Concerning the first objective, finding the relation between ITED scores and use of the library, it was found that the four freshman girls who indicated that they used the library only occasionally were at 46, 95, 60, and 60 in percentile ranking. The two freshman boys who used it occasionally were at 60 and 1. Except for the last boy named, these scores would indicate that some of the better students do not use the library as extensively as some of the poorer students. This same boy could probably be disqualified here, as it may be noted by observation that he is one of the most regular "occupants" if not "users." Perhaps the word OCCASIONALLY is beyond his comprehension.

For the juniors, three students who indicate only occasional use have composite scores of 70, 70, and 30, which would again seem to show a tendency for better students to make less use of the library. One

22

junior girl responded "rarely." Her composite score is 35. Perhaps the fact that she has few study halls may account for her response. In conclusion, of the nine students who use the library less than often, six have composite scores above the 50th percentile. Since no reasons were asked for, these would be only assumptions:

1. The better students have less free time.

2. The better students spend more time on school work, and have less time for optional reading.

This leads to another consideration: predominance of recreational reading or reading for school assignments. One freshman girl and four freshman boys use the library primarily for school assignments. Their composite scores are 72, 26, 1, 10, and 39. There is little consistency here. About the only conclusions which might be reached are that with 75 percent of the freshmen doing mostly recreational reading.

- 1. The freshmen like to read.
- 2. The freshmen are good readers.
- 3. The freshmen have time to read.

The junior class shows quite a different response, with 59 percent doing more reading for school assignments than for recreational purposes. The composite scores of those doing school assignments range from 4 to 88, so again there is little relationship. Apparently there are reasons other than ITED rank which determine how much and what kind of reading students do.

To really prove any relationship between ITED scores and library skills, a test of library skills would be required. 70 percent of the students felt that they could usually find materials they needed in the library. The freshmen who did not feel as confident had scores of 60, 53, 46, 46, 39, 10, and 1, with a median of 46. The juniors were less confident: 12 did not feel that they could usually find materials. Their scores ranged from 6 to 41, with a median score of 25. This is significantly low, and would indicate that generally poor scholastic achievement may correlate with a lack of confidence in their study skills.

In analyzing the composite scores in relation to the scores on "Sources of Information," the widest spread between the two is 46, and the smallest is zero. However, in 25 instances the spread was ten or less. For the 51 students, the score for "Sources of Information" is 48.1, and the composite is 45.2, which is quite close.

One more inquiry should be made here. How do the scores on "Sources" compare with the student's own estimation of his library skills? The freshman with the lowest score felt that he could usually find what he needed. And one freshman, who felt that only sometimes could she find material, had a score of 88. In the junior class, the student scoring lowest overall felt that he could sometimes find needed material.

What does this study indicate regarding the teaching of library skills in the future?

- It is encouraging that the freshmen have a higher score on "Sources" as the teaching has been concentrated in the junior high school classes.
- 2. It is apparent that more time needs to be given the slower students in teaching library skills.

What types of reading should be encouraged? The student responses indicate a very even distribution between fiction and non-fiction, with a slight edge for fiction. It seems unnecessary to encourage one over the other. The area of English reading least liked is poetry, so more effort should be made to encourage a liking for poetry. There is a good distribution of interest in fiction preferences, except for historical fiction. Non-fiction choices other than biography should be encouraged, but probably by the departmental instructors.

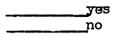
It is obvious that the library needs more of the usual fiction choices: sports stories, adventure, mysteries, science fiction, and teen-age romances. The non-fiction area is being improved, and more attractive, modern books might encourage the reading of non-fiction. In the reference set area, probably <u>World Book</u> should be the next encyclopedia purchased, mostly because of the junior and senior high combination. While inadequate as a high school encyclopedia, it is used a great deal, although <u>Colliers</u> is gaining in popularity.

No conclusions could be drawn concerning the relationship between years in the Colo school and library use. A great majority of the students have spent all or most of their school years in Colo. Also, there was little correlation between the previous school attended and the ITED scores on "Sources," although some of these newcomers have had as much as a semester of library instruction in schools previously attended.

Admittedly, the material for this research is purely local, and the numbers involved and the methods used do not provide for any detailed statistical information. However, it seems that it might be feasible for someone wishing to do a major investigation to use this paper as a starting point, and develop a more scientific approach, using larger numbers of students. Perhaps this could qualify as a pilot study for such research.

25

1. Have you attended the Colo schools during your entire school life?



2. If you have not attended the Colo schools during your entire school life, how many years have you attended the Colo schools?

\_\_\_\_years

3. Do you come into the library: (check one)

often (at least twice a week)
occasionally (at least twice a month)
rarely (at least twice a semester)
never

4. Do you check out library materials mostly for: (check one)

\_\_\_\_\_recreational reading

5. Do you feel that you know how to find what you need in the library without asking for help: (check one)

\_\_\_\_\_usually \_\_\_\_\_sometimes \_\_\_\_\_rarely

6. If you could read the same book in paperback or in full-size hardback edition, which would you choose? (check one)

\_\_\_\_\_paperback \_\_\_\_\_hardback

7. How many books would you estimate that you checked out of the library during the first semester of this school year?

books

8. What was the favorite library book which you read last semester, if any?

(title)

9. Which type of reading do you prefer? (check one)

\_\_\_\_\_fiction (made-up stories, poetry, etc.) \_\_\_\_\_\_non-fiction (true-life stories, adventures, history, \_\_\_\_\_\_science, etc.) 10. Indicate by "yes" or "no" in the blank whether or not you like to read each type of fiction: (Fill in all the blanks)

\_\_\_\_\_poetry \_\_\_\_\_drama \_\_\_\_\_essays (compositions with a personal point of view) \_\_\_\_\_stories

11. Indicate by "yes" or "no" in the blank which type of stories you
like or dislike. (Fill in all the blanks)

\_\_\_\_\_adventure stories \_\_\_\_\_historical fiction \_\_\_\_\_\_mysteries \_\_\_\_\_\_science fiction \_\_\_\_\_\_sports stories \_\_\_\_\_\_teen-age romances \_\_\_\_\_\_westerns

12. Indicate by "yes" or "no" in the blank which type of non-fiction you like or dislike. (Fill in all the blanks)

\_\_\_\_\_biography \_\_\_\_\_history \_\_\_\_\_"how-to" books in mechanics, homemaking, etc. \_\_\_\_\_religion and philosophy \_\_\_\_\_science \_\_\_\_\_true sports stories

13. Have you used the "Reader's Guide" this year to locate magazine articles for class assignments? (Check one)

\_\_\_\_<del>yes</del> \_\_\_\_no

14. Which set of encyclopedias in our library do you like to use in finding information for assignments? (Write "1" before your favorite, and "2" before your second choice. Leave the others blank.)

Americana Britannica Colliers Encyclopedia International Grolier Our Wonderful World World Book

For items 15 and 16, rank the five choices in each by numbering from 1 to 5. "1" means that you enjoy it most, and "5" that you enjoy it least. You will write a figure in each blank.

15. Which area of the school curriculum do you enjoy most?

English			
mathematics			
science			
	s		
vocational (b	usiness, agricultu	ure, art, home	economics)

16. Which area of study in your English classes do you enjoy most?

 composition
 drana
 grammar
 literature
 spelling

17. Are you on the honor roll: (check one)

\_\_\_\_\_usually \_\_\_\_\_\_sometimes \_\_\_\_\_\_seldom \_\_\_\_\_\_never

18. If possible, would you enroll in the course in vocabulary building and speed reading which may be offered during the next school year? (check one)

\_\_\_\_yes \_\_\_\_\_no

(Signed)\_\_\_\_\_

- A. Iowa Tests of Educational Development = ITED
- B. Freshman Girls = F-10 to F-20
- C. Freshman Boys = F-30 to F-42
- D. Junior Girls = J-10 to J-19
- E. Junior Boys = J-30 to J-46
- F. Composite Scores = Comp.

## FAVORITE BOOKS NAMED IN STUDENT

#### QUESTIONNAIRE RESPONSES

- Aldrich <u>A Lantern in Her Hand</u>
- Barry <u>Bellevue is a State of Mind</u>
- Bonham <u>Viva Chicano</u>
- Borland When the Legends Die
- Bradbury <u>The Illustrated Man</u>
- Cassidy The Wild One
- Christie And Then There Were None
- Davis Yes, I Can
- Felsen Hot Rod
- Freeman <u>Mrs</u>. <u>Mike</u>
- Gallico <u>The Poseidon Adventure</u>
- Griffin <u>Black Like Me</u>
- Gunther <u>Death</u> <u>Be</u> <u>Not</u> <u>Proud</u>
- Hailey <u>Runway Zero Eight</u>
- Holt <u>Menfreya</u> in the Morning
- Hyman <u>No Time for Sergeants</u>
- Jackson We Have Always Lived in the Castle
- Lipsyte The Contender
- London <u>White Fang</u>
- Maclean <u>Golden Rendezvous</u>
- Morris Brian's Song
- Orwell <u>1984</u>
- Potok <u>The</u> Chosen
- Sewell Black Beauty

Smith Joy in the Morning

Steinbeck <u>The</u> <u>Pearl</u>

Stewart The Possession of Joel Delaney

Twain <u>Tom Sawyer</u>

.

Student Number	Correctness of Expression	Quantitative Thinking	Social Studies	Natural Science	Literary Materials	General Vocabulary	Sources of Information	Composite	Reading Total		32
F-10 F-11 F-12 F-13 F-14 F-15 F-16 F-17 F-18 F-19 F-20	39 54 20 68 39 94 87 75 39 81 32	49 24 40 50 49 56 40 52 10 7	80 93 54 76 93 91 80 47 71 76	10 66 10 55 14 96 61 66 10 10 30	93 80 2 84 44 93 63 84 63 51 98	80 27 73 17 93 80 85 56 73 73	96 70 55 75 51 84 88 80 40 88 75	72 72 15 66 46 95 77 77 77 39 60 60	67 86 2 79 95 77 82 9 55 82		
girls' avg•	57.1	40•4	69•5	<u>38.9</u>	68.6	67.0	72.9	61.7	64•6		
F-30 F-31 F-32 F-33 F-34 F-35 F-35 F-36 F-37 F-38 F-39 F-40 F-41 F-41 F-42	$ \begin{array}{c} 10\\ 81\\ 54\\ -47\\ 614\\ 526\\ -26\\ -25\\ -532\\ \end{array} $	31 24 31 10 49 31 10 10 18 74 56 63 18	66 711 747 88 12 60 99 60 12 99 66	4 61 76 10 42 55 10 48 66 42 19 10 42	38 37 80 26 91 14 75 38 63 91 20	7 73 7 1 9 1 7 65 7 7 7 7 7 9 7 9 7 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9 7 7 9 7 9 7 9 9 9 7 9 7 9 7 9 7 9 9 7 9 9 7 9 9 7 9 9 7 9 7 9 7 9 9 9 9 7 9 7 9 7 9 9 7 9 9 7 9 9 7 9 9 7 9 7 9 9 9 9 7 9	51 46 35 3 65 65 24 55 1 29 1 15 65	26 53 146 77 10 53 53 53 10 46 39	29 49 51 36 27 16 23 24 56 42		
boys <sup>1</sup> avg•	35•6	<u>32.7</u>	46.0	35.0	44•9	46.6	38.8	39•5	38•7	a dagan sanagan sanaga	
class avg•	45•4	<u>36•3</u>	56.7	36.8	55•8	56.0	54•5	49.7	50.6		
							ITE red	shman ( ) Scor = hig en = 1	∍s h	Anan Yory 1999 - Anthon A. Anthon A. An Yorkawa and Anthony and Anthony and Anthony and Anthony and Anthony and	

automodel       but retout       return of the ret	$3 \cdot 4$ $3 \cdot 5$ $5 \cdot 5$ $7 \cdot 7$ $2 \cdot 5$ $7 \cdot 7$ $2 \cdot 5$ $2 \cdot 4$ $3 \cdot 5$ $5 \cdot 5$ $5 \cdot 7$ $3 \cdot 6 \cdot 7$ $7 \cdot 7$ $2 \cdot 5 \cdot 5$ $5 \cdot 5 \cdot 5$ $5 \cdot 5 \cdot 5 \cdot 5$ $5 \cdot 7 \cdot 7$ $3 \cdot 7 \cdot 7$ $2 \cdot 5 \cdot 5 \cdot 5 \cdot 5$ $5 \cdot 7 \cdot 7 \cdot 7$ $7 \cdot 7 \cdot 7 \cdot 7 \cdot 7$ $7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7$ $7 \cdot 7 \cdot$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\underline{88}$ $80$ $55$ $92$ $74$ $82$ $88$ $77$ $50$ $80$ $66$ $92$ $68$ $55$ $70$ $\underline{82}$ $9$ $28$ $14$ $15$ $7$ $71$ $25$ $21$ $40$ $48$ $55$ $73$ $30$ $55$ $53$ $67$ $55$ $64$ $45$ $84$ $53$ $40$ $58$ $67$ $29$ $43$ $26$ $52$ $53$ $40$ $35$ $51$ $17$ $4$ $11$ $31$ $9$ $18$ $15$ $21$ $75$ $59$ $71$ $84$ $61$ $61$ $71$ $72$ $17$ $28$ $7$ $41$ $30$ $25$ $25$ $31$ $12$ $43$ $26$ $22$ $15$ $66$ $30$ $35$ $37.2$ $47.7$ $37.6$ $58.6$ $40.0$ $51.3$ $46.9$ $52.4$ $88$ $80$ $71$ $73$ $80$ $66$ $80$ $72$ $29$ $28$ $17$ $58$ $24$ $29$ $25$ $31$ $40$ $59$ $31$ $26$ $53$ $32$ $41$ $40$ $70$ $9$ $11$ $3$ $2$ $29$ $12$ $4$ $29$ $28$ $6$ $31$ $19$ $29$ $20$ $17$ $50$ $23$ $36$ $41$ $30$ $29$ $30$ $31$ $55$ $54$ $81$ $73$ $74$ $82$ $75$ $72$ <	$\frac{88}{50}$ $80$ $55$ $92$ $74$ $82$ $88$ $77$ $9$ $28$ $14$ $15$ $7$ $71$ $25$ $21$ $40$ $48$ $55$ $73$ $30$ $55$ $53$ $67$ $55$ $64$ $45$ $84$ $53$ $40$ $58$ $67$ $29$ $43$ $26$ $52$ $53$ $40$ $35$ $51$ $17$ $4$ $11$ $31$ $9$ $18$ $15$ $21$ $17$ $43$ $26$ $22$ $15$ $66$ $30$ $35$ $17$ $28$ $7$ $41$ $30$ $25$ $25$ $31$ $12$ $43$ $26$ $22$ $15$ $66$ $30$ $35$ $37.2$ $47.7$ $37.6$ $58.6$ $40.0$ $513$ $469$ $524$ $884$ $80$ $71$ $73$ $80$ $66$ $80$ $72$ $29$ $28$	$\underline{88}$ 80       55       92       74       82       88       77         50       80       66       92       68       55       70       82         9       28       14       15       7       71       25       21         40       48       55       73       30       55       53       67         55       64       45       84       53       40       58       67         29       43       26       52       53       40       35       51         17       4       11       31       9       18       15       21         55       59       71       84       61       61       71       72         17       28       7       41       30       25       25       31         12       43       26       22       15       66       30       35         37.2       47.7       37.6       58.6       40.0       51.3       46.9       52.4         88       80       71       73       80       66       80       72         29       28       17
80 $55$ $92$ $74$ $82$ $88$ $77$ $80$ $66$ $92$ $68$ $55$ $70$ $82$ $28$ $14$ $15$ $7$ $71$ $25$ $21$ $48$ $55$ $73$ $30$ $55$ $53$ $67$ $64$ $45$ $84$ $53$ $40$ $58$ $67$ $43$ $26$ $52$ $53$ $40$ $35$ $51$ $44$ $11$ $31$ $9$ $18$ $15$ $21$ $28$ $7$ $41$ $30$ $25$ $25$ $31$ $43$ $26$ $22$ $15$ $66$ $30$ $35$ $43$ $26$ $22$ $15$ $66$ $30$ $35$ $47$ $77$ $58$ $40.0$ $51.3$ $46.9$ $52.4$ $80$ $71$ $73$ $80$ $66$ $80$ $72$ $88$ $76$ $84$ $80$ $77$ $80$ $82$ $28$ $17$ $58$ $24$ $29$ $25$ $31$ $59$ $31$ $26$ $53$ $32$ $41$ $40$ $9$ $11$ $3$ $2$ $29$ $12$ $4$ $28$ $6$ $31$ $19$ $29$ $30$ $31$ $54$ $81$ $73$ $74$ $82$ $75$ $72$ $64$ $36$ $73$ $74$ $77$ $47$ $56$ $18$ $8$ $7$ $37$ $1$ $4$ $17$ $59$ $22$ $41$ <th>80 <math>55</math> <math>92</math> <math>74</math> <math>82</math> <math>88</math> <math>77</math> <math>80</math> <math>66</math> <math>92</math> <math>68</math> <math>55</math> <math>70</math> <math>82</math> <math>28</math> <math>14</math> <math>15</math> <math>7</math> <math>71</math> <math>25</math> <math>82</math> <math>44</math> <math>55</math> <math>73</math> <math>30</math> <math>55</math> <math>53</math> <math>67</math> <math>44</math> <math>55</math> <math>73</math> <math>30</math> <math>55</math> <math>53</math> <math>67</math> <math>43</math> <math>26</math> <math>52</math> <math>53</math> <math>40</math> <math>35</math> <math>51</math> <math>47</math> <math>7</math> <math>37.6</math> <math>58.6</math> <math>40.0</math> <math>51.3</math> <math>46.9</math> <math>52.4</math> <math>80</math> <math>71</math> <math>73</math> <math>80</math> <math>66</math> <math>80</math> <math>72</math> <math>47.7</math> <math>37.6</math> <math>58.6</math> <math>40.0</math> <math>51.3</math> <math>46.9</math> <math>52.4</math> <math>80</math> <math>71</math> <math>73</math> <math>80</math> <math>80</math> <math>82</math> <math>31</math> <math>44.9</math> <math>92</math> <math>25</math> <math>31</math> <math>59</math> <math>31</math> <math>26</math> <math>53</math> <math>32</math> <math>41</math> <math>40</math> <math>9</math> <math>9</math> <math>11</math> <math>3</math> <math>22</math> <math>29</math> <math>30</math> <math>3</math></th> <th>80 <math>55</math> <math>92</math> <math>74</math> <math>82</math> <math>88</math> <math>77</math> <math>80</math> <math>66</math> <math>92</math> <math>74</math> <math>82</math> <math>88</math> <math>77</math> <math>28</math> <math>14</math> <math>15</math> <math>7</math> <math>71</math> <math>25</math> <math>21</math> <math>48</math> <math>55</math> <math>73</math> <math>30</math> <math>55</math> <math>53</math> <math>67</math> <math>44</math> <math>45</math> <math>84</math> <math>53</math> <math>40</math> <math>35</math> <math>51</math> <math>44</math> <math>11</math> <math>31</math> <math>9</math> <math>18</math> <math>15</math> <math>21</math> <math>28</math> <math>7</math> <math>41</math> <math>30</math> <math>25</math> <math>25</math> <math>31</math> <math>43</math> <math>26</math> <math>22</math> <math>15</math> <math>66</math> <math>30</math> <math>35</math> <math>47</math> <math>77</math> <math>37.6</math> <math>58.6</math> <math>40.0</math> <math>51.3</math> <math>46.9</math> <math>52.4</math> <math>80</math> <math>71</math> <math>73</math> <math>80</math> <math>66</math> <math>80</math> <math>72</math> <math>82</math> <math>80</math> <math>76</math> <math>84</math> <math>80</math> <math>77</math> <math>80</math> <math>82</math> <math>82</math> <math>31</math> <math>44.9</math> <math>9</math> <math>11</math> <math>32</math> <math>22</math> <math>29</math> <math>12</math> <math>44</math> <math>40</math> <math>9</math></th>	80 $55$ $92$ $74$ $82$ $88$ $77$ $80$ $66$ $92$ $68$ $55$ $70$ $82$ $28$ $14$ $15$ $7$ $71$ $25$ $82$ $44$ $55$ $73$ $30$ $55$ $53$ $67$ $44$ $55$ $73$ $30$ $55$ $53$ $67$ $43$ $26$ $52$ $53$ $40$ $35$ $51$ $47$ $7$ $37.6$ $58.6$ $40.0$ $51.3$ $46.9$ $52.4$ $80$ $71$ $73$ $80$ $66$ $80$ $72$ $47.7$ $37.6$ $58.6$ $40.0$ $51.3$ $46.9$ $52.4$ $80$ $71$ $73$ $80$ $80$ $82$ $31$ $44.9$ $92$ $25$ $31$ $59$ $31$ $26$ $53$ $32$ $41$ $40$ $9$ $9$ $11$ $3$ $22$ $29$ $30$ $3$	80 $55$ $92$ $74$ $82$ $88$ $77$ $80$ $66$ $92$ $74$ $82$ $88$ $77$ $28$ $14$ $15$ $7$ $71$ $25$ $21$ $48$ $55$ $73$ $30$ $55$ $53$ $67$ $44$ $45$ $84$ $53$ $40$ $35$ $51$ $44$ $11$ $31$ $9$ $18$ $15$ $21$ $28$ $7$ $41$ $30$ $25$ $25$ $31$ $43$ $26$ $22$ $15$ $66$ $30$ $35$ $47$ $77$ $37.6$ $58.6$ $40.0$ $51.3$ $46.9$ $52.4$ $80$ $71$ $73$ $80$ $66$ $80$ $72$ $82$ $80$ $76$ $84$ $80$ $77$ $80$ $82$ $82$ $31$ $44.9$ $9$ $11$ $32$ $22$ $29$ $12$ $44$ $40$ $9$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	555 $92$ $92$ $74$ $68$ $82$ $55$ $888$ $70$ $25$ $77$ $25$ $14$ $15$ $7$ $7$ $71$ $25$ $25$ $21$ $82$ $21$ $55$ $73$ $45$ $30$ $55$ $55$ $30$ $55$ $67$ $67$ $58$ $51$ $11$ $31$ $26$ $22$ $9$ $25$ $40$ $58$ $51$ $67$ $71$ $72$ $22$ $7$ $41$ $26$ $9$ $22$ $15$ $66$ $66$ $30$ $35$ $35$ $37.6$ $58.6$ $58.6$ $40.0$ $51.3$ $46.9$ $46.9$ $52.4$ $71$ $73$ $36$ $17$ $58$ $11$ $31$ $26$ $80$ $22$ $25$ $31$ $82$ $31$ $29$ $20$ $17$ $31$ $26$ $77$ $80$ $82$ $2757231192920311130293031817374747477477747774777477747757272727272737477477747757272727374771030464130255346$	55 $92$ $74$ $82$ $88$ $77$ $66$ $92$ $68$ $55$ $70$ $82$ $14$ $15$ $7$ $71$ $25$ $21$ $55$ $73$ $30$ $55$ $53$ $67$ $45$ $84$ $53$ $40$ $58$ $67$ $26$ $52$ $53$ $40$ $35$ $51$ $11$ $31$ $9$ $18$ $15$ $21$ $71$ $84$ $61$ $61$ $71$ $72$ $7$ $41$ $30$ $25$ $25$ $31$ $26$ $22$ $15$ $66$ $30$ $35$ $37.6$ $58.6$ $40.0$ $51.3$ $46.9$ $52.4$ $71$ $73$ $80$ $66$ $80$ $72$ $31$ $26$ $53$ $32$ $41$ $40$ $11$ $3$ $2$ $29$ $12$ $4$ $6$ $31$ $19$ $29$ $20$ $17$ $36$ $41$ $30$ $29$ $30$ $31$ $81$ $73$ $74$ $77$ $47$ $56$ $8$ $7$ $37$ $1$ $4$ $17$ $36$ $73$ $74$ $77$ $47$ $56$ $8$ $41$ $37$ $36$ $25$ $31$ $41$ $46$ $30$ $55$ $53$ $46$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9274828877926855708215771252173305553678453405867525340355131918152184616171724130252531221566303558.640.051.346.952.473806680728424292531265332414032291243119292017413029303173747747567371417413710304641373625314630555346	92 $92$ $92$ $92$ $68$ $57$ $77$ $71$ $25$ $77$ $25$ $21$ $77$ $25$ $21$ $77$ $25$ $21$ $77$ $25$ $21$ $77$ $25$ $21$ $77$ $25$ $21$ $77$ $25$ $21$ $77$ $25$ $21$ $25$ $21$ $25$ $21$ $25$ $21$ $25$ $21$ $25$ $21$ $25$ $25$ $31$ $9$ $18$ $15$ $21$ $21$ $21$ $21$ $22$ $25$ $31$ $22$ $25$ $25$ $31$ $22$ $15$ $66$ $30$ $35$ $77$ $22$ $25$ $31$ $22$ $25$ $31$ $22$ $25$ $31$ $22$ $25$ $31$ $22$ $25$ $31$ $22$ $25$ $31$ $22$ $23$ $31$ $19$ $29$ $20$ $17$ $41$ $30$ $29$ $29$ $30$ $31$ $73$ $74$ $82$ $75$ $72$ $73$ $74$ $82$ $75$ $75$ $72$ $73$ $74$ $82$ $75$ $75$ $72$ $73$ $74$ $82$ $75$ $75$ $72$ $73$ $74$ $47$ $77$ $47$ $47$ $47$ $46$ $46$ $30$ $21$ $41$ $30$ $21$ $41$ $30$ $21$ $41$ $30$ $21$ $41$ $30$ $21$ $41$ $30$ $21$ $41$ $30$ $21$ $41$ $30$ $21$ $41$ $30$ $21$ $41$ $30$ $21$ $41$ $31$ $46$ $30$ $21$ $41$ $31$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $32$ $31$ $31$ $31$ $31$ $32$ 
$74$ $82$ $88$ $77$ $68$ $55$ $70$ $82$ $7$ $71$ $25$ $21$ $30$ $55$ $53$ $67$ $53$ $40$ $58$ $67$ $53$ $40$ $35$ $51$ $9$ $18$ $15$ $21$ $61$ $71$ $72$ $30$ $25$ $25$ $31$ $15$ $66$ $30$ $72$ $30$ $51 \cdot 3$ $46 \cdot 9$ $52 \cdot 4$ $80$ $66$ $80$ $72$ $40 \cdot 0$ $51 \cdot 3$ $46 \cdot 9$ $52 \cdot 4$ $80$ $66$ $80$ $72$ $31$ $46 \cdot 9$ $52 \cdot 4$ $80$ $22$ $25$ $31$ $40 \cdot 0$ $51 \cdot 3$ $46 \cdot 9$ $52 \cdot 4$ $80$ $22$ $29$ $30$ $31$ $29$ $20$ $17$ $30$ $31$ $29$ $30$ $31$ $46$ $37$	74 $82$ $88$ $77$ $68$ $55$ $70$ $82$ $7$ $71$ $25$ $21$ $30$ $55$ $53$ $67$ $53$ $40$ $58$ $67$ $53$ $40$ $35$ $51$ $9$ $18$ $15$ $21$ $61$ $71$ $72$ $30$ $25$ $25$ $31$ $40.0$ $51.3$ $46.9$ $52.4$ $80$ $66$ $80$ $72$ $25$ $25$ $31$ $53$ $29$ $12$ $44$ $80$ $66$ $80$ $72$ $29$ $12$ $44$ $19$ $29$ $20$ $17$ $30$ $29$ $30$ $31$ $74$ $82$ $75$ $72$ $74$ $77$ $47$ $56$ $37$ $10$ $30$ $46$ $37$ $36$ $25$ $31$	$74$ $82$ $88$ $77$ $68$ $55$ $70$ $82$ $7$ $71$ $25$ $21$ $30$ $55$ $53$ $67$ $53$ $40$ $58$ $67$ $53$ $40$ $55$ $51$ $9$ $18$ $15$ $21$ $61$ $61$ $71$ $72$ $30$ $25$ $25$ $31$ $15$ $66$ $30$ $35$ $40.0$ $51.\cdot3$ $46.\cdot9$ $52.\cdot4$ $80$ $66$ $80$ $72$ $80$ $77$ $80$ $82$ $24$ $29$ $25$ $311$ $53$ $32$ $41$ $40$ $2$ $29$ $12$ $4$ $19$ $29$ $20$ $17$ $30$ $29$ $30$ $31$ $77$ $47$ $57$ $72$ $74$ $777$ $47$ $56$ $37$ $1$ </td
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
77 82 21 67 67 51 21 72 31 35 52 72 82 31 40 4 17 31 72 56 17 46 31 46 51	$\begin{array}{c} 77\\ 82\\ 21\\ 67\\ 67\\ 51\\ 21\\ 72\\ 31\\ 35\\ 52.4\\ 72\\ 82\\ 31\\ 40\\ 4\\ 17\\ 31\\ 72\\ 56\\ 17\\ 46\\ 31\\ 46\end{array}$	$\begin{array}{c} 77\\ 82\\ 21\\ 67\\ 67\\ 51\\ 21\\ 72\\ 31\\ 35\\ 52.4\\ 72\\ 82\\ 31\\ 40\\ 4\\ 17\\ 31\\ 72\\ 56\\ 17\\ 46\\ 31\\ 46\\ 51\\ \end{array}$