

A COMPARISON OF EIGHTH GRADE BOYS' AND GIRLS' ACHIEVEMENT  
IN SCIENCE AT GRAMBLING LABORATORY SCHOOL  
GRAMBLING, LOUISIANA

by

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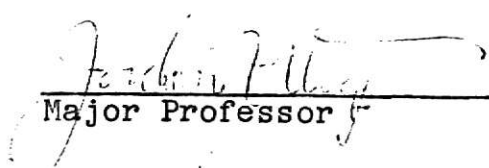
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## INTRODUCTION TO THE PROBLEM

It is the belief of many that there are certain subject areas in which boys' achievement levels are higher than girls achievement levels. Subject areas such as science are thought to be more appealing to boys than to girls, therefore, the achievement levels are higher.

### The Problem

Statement of the Problem. The purpose of this study was to compare the achievement level of a group of eighth grade boys and girls in the area of science. Answers to the following questions were sought. (1) Do boys achieve higher than girls on the Science Research Associates Inc. (SRA) achievement test? (2) Do boys achieve higher than girls on semester teacher made test? and (3) Do boys achieve higher than girls on semester laboratory reports?

Important of the Problem. This study was felt to be important to educators because science is an area in which continuous progress is needed. Further, if boys achieve higher than girls, classroom teachers can introduce new techniques so science can be appealing to both boys and girls and encourage the boys to work more closely with the girls.

Design of Study. This study was limited to thirty-four pupils, seventeen boys and seventeen girls in one of the regular eighth grade classes of Grambling College Laboratory School in Grambling, Louisiana during the 1971-72 school year. The population used in this study was totally black and the population had an age range of thirteen and one-half to fourteen. Many factors such as intelligence quotient, sociological, economic, and environmental conditions were omitted, thus preventing a more valid and reliable assessment of the study group's achievement in science.

Achievement level was defined by the researcher as performance on the SRA achievement test in the area of science, semester grades reported by the teacher from a teacher made science test, and semester grades reported by the teacher from the science laboratory reports during the first semester of school, 1971-72.

In this study three data gathering instruments, SRA Achievement Series in the area of science, science teacher made test, and science laboratory reports were used.

The SRA Achievement Series is a commercially prepared test published by Science Research Associates, Inc. It is divided into seven major areas, social studies, science, language arts, arithmetic, modern math, reading and work study skills. The SRA Achievement Series includes specific directions for administration, scoring, and use of the tests. It also supplies data on reliability and validity.

The Science Research Associates, Inc. test provides grade equivalents and percentile scores.

The second instrument used in this study was a first semester teacher made science test. It was an objective test consisting of 100 questions which contained material covered during the first semester. The questions on the teacher made test were designed to measure different learning results. These results were in the form of knowledge based upon memory, understanding of concepts, and application of facts, concepts and principles. The test questions were true and false, alternate - responses, completion, short answer and multiple choice questions. Each type of question had a value of five points. The boys and girls were graded by correct answers. Their responses were considered either correct or incorrect when compared with the teacher's constructed key.

The third data gathering instrument used in this study was the teacher made laboratory reports. These laboratory reports were written exercises which covered teacher selected experiments. These exercises were administered the day after the objective teacher made test. The written reports consisted of the name of the experiment, the procedures followed, materials used, and conclusions. The total value of the laboratory reports was 100. Like the teacher made test, the science teacher used a key to grade the laboratory reports.

Limitation of the Study. This study was limited to one of the regular eighth grade classes of Grambling Laboratory School in Grambling, Louisiana.

Population. The population was a group of eighth grade boys and girls from Grambling Laboratory School, in Grambling, Louisiana. The population consisted of thirty-four pupils, seventeen boys and seventeen girls. The population was totally black and had an age range of thirteen and one-half to fourteen.

Procedures. In this study data was collected by using three instruments, namely, a Science Research Associates, Inc. Achievement test, a science teacher made test and science laboratory reports. Students' names were distributed by the classroom teacher to the researcher. The researcher went to the counselor's office and tabulated scores from the Science Research Associates, Inc. test in percentiles and grade equivalents. In addition, the student record book was given to the researcher and scores were tabulated for each student from a semester teacher made test and semester laboratory reports. These scores were arranged in tabular form and the median was found for the students.

#### Definition of Terms

Achievement. A measure of how much a student has learned in terms of performance on the Science Research

Associates, Inc. achievement test, a teacher made science test and teacher made science laboratory reports.

SRA. A standardized commercially prepared test published by Science Research Associates, Inc.

Percentile Score. One of the ninety-nine point scores that divides rank distribution into groups, each containing 1/100 of the scores.

Grade Equivalents. Scores developed to indicate the school grade month in the school grade which is assigned to the average chronological age, mental age, test scores or to characteristics of pupils classified at this school grade.

Teacher Made Test. A test that is constructed by the teacher over material that has been taught during the semester.

Median. The counting average.



## REVIEW OF LITERATURE

A number of researchers have completed studies on the achievement levels of boys and girls in science, and some data has revealed that boys had a higher achievement level than girls. According to Dilorenzo, " . . . the science achievement for both boys and girls was quite bell shaped, but boys' scores exceeded the girls' scores."<sup>1</sup> The boys achievement level in other subject areas, however was slightly below average. Waetzen stated:

It is patently clear that among the under achievers, there are two to three times as many boys as there are girls; that there are at least four times as many boys as there are girls who are poor readers; and that general school progress of girls at all levels is superior to that of boys.<sup>2</sup>

These facts alone suggest that efforts should be made to ensure that schools become a significant experience for boys. Waetzen further stated:

When one examines the skills possessed by pupils, it is obvious that girls have marked superiority over boys in the language area. Since school is essentially a verbal, symbolic, linguistic experience, it's a small wonder that

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<sup>1</sup>Louis F. Dilorenzo. "A Comparison of the Science Achievement of Eighth Grade Pupils by Regular and Special Science Teachers." Science Education. XVIII (March, 1963) pp. 203-304.

<sup>2</sup>Walter B. Waetzen. "Learning and Motivation: Implications for the Teaching of Science." Reading in Science Education for the Secondary School, ed. Hans O. Andersen (Macmillan Company, 1969) p. 87.

girls do better than boys. On the other side of the ledger it can be reported that boys are somewhat better than girls in math and science. This slight superiority can be attributed to the fact that analytical thinking is the cognitive skill that undergirds math and science.<sup>3</sup>

Charles indicated, in a study which he had done on "Science Achievement" among a selected group of high school boys and girls, that the achievement level of the boys was one grade level below average.<sup>4</sup> According to Charles, the boys' level of achievement in science was due to their reading ability.<sup>5</sup> Charles further stated that the girls' reading ability was above average; therefore, the girls were able to achieve higher in science than the boys.<sup>6</sup> In 1969, Lodge did a study on "Students' Rating of Science Skill" and discovered that girls rated higher than boys in learning skills in science.<sup>7</sup> Gaulden, a junior high school teacher, supports Lodge's idea of girls rating higher than boys:

In the process of working with a group of eighth graders, I found that girls had a higher degree of achievement than the boys. Girls turned in more complete assignments than boys

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<sup>3</sup>Ibid.

<sup>4</sup>C. M. Charles. "Science Achievement Among Children." Science Education. LIVIII (February, 1964) p. 64.

<sup>5</sup>Ibid.

<sup>6</sup>Waetzen, p. 95.

<sup>7</sup>Frank Lodge. "Students' Rating of Science Skill." Science Education. LIII (December, 1969) p. 421.

and girls had a better quality of written work than boys.<sup>8</sup>

Some researchers found no meaningful differences in science achievement of boys and girls. In 1964, Biscak studied the Achievement in Eighth Grade Science Classes. Biscak found no significant differences in the achievement level of eighth grade boys and girls.<sup>9</sup> Biscak mentioned, however, that the small differences that occurred in the achievement level could be attributed to the prior knowledge of the course content and ability levels of the boys and girls.<sup>10</sup> Boeck and Washton came up with much the same results as Biscak as they found no differences in the achievement levels of boys and girls.<sup>11</sup> Boeck and Washton believed that reasoning and interest in conjunction with achievement in other courses provided the best predictors for achievement in science.<sup>12</sup>

Very often boys and girls do not perform well in science and it could be associated with the fact that they

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<sup>8</sup>Statement by Ruben Gaulden. Personal Interview (March 10, 1972).

<sup>9</sup>Laddie Biscak. "Achievement in Eighth Grade Science Classes." Science Education. XLVII (February, 1964) p. 12.

<sup>10</sup>Ibid.

<sup>11</sup>Clarence H. Boeck and Nathan S. Washton. "Science in the Secondary Review." Review of Educational Research. XXXI (June, 1964), p. 260.

<sup>12</sup>Ibid.

are not able to see how laboratory experiences and experiments can add to their understanding of science. Cohen pointed out that laboratory experiences are good if they lead boys and girls to reason things out, and to form associations of science understandings.<sup>13</sup> Cohen concluded that laboratory experiences should maximize opportunities for freedom of thought and activity by providing ample time and adequate facilities for determining experimental factors relating to the solution of problems.<sup>14</sup> The ability of students to record and report the results of a laboratory experiment can be tested by the teacher by performing the experiment in front of the class, announcing all observations, and then requiring each boy and girl "to enter all laboratory data in his laboratory notebook in a proper form. This may be followed by a report of the experiment to include a hypothesis and a suggested new experiment to test the hypothesis."<sup>15</sup> Charen said that written reports would be a positive step of encouragement for boys and girls because they could think of their reports as being similar to those reports prepared by research scientists.<sup>16</sup>

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<sup>13</sup>David Cohen. "The Significance of Research in Secondary School Science Education." Science Education. XVIII (March, 1964) p. 160.

<sup>14</sup>Ibid., p. 161.

<sup>15</sup>Jack C. Jeffrey. "Evaluating of Science Laboratory Instruction." Science Education. LI (March 1967) p. 193.

<sup>16</sup>George Charen. "Do Laboratory Methods Stimulate Critical Thinking?" Science Education. LIV (July, 1970) p. 270.

How can true picture of boys and girls achievement level in science be determined? One way might be to administer a standardized achievement test. A standardized achievement test can be helpful in giving information about the achievement levels of boys and girls. For example, a standardized test can give the achievement of boys and girls in the form of grade equivalents. Carter discovered in a study that even though boys and girls had identical levels of achievement on a standardized test, teachers gave higher grades to girls.<sup>17</sup>

It is hardly surprising that boys take more science courses than girls and it appears that boys become more involved in science and achieve better on standardized tests.<sup>18</sup> Cline, Richards and Needham have indicated that it is puzzling to find the girls get higher grades in science based upon classroom participation, but obtain significantly lower scores on an objective test of knowledge in science.<sup>19</sup> It seems that Cline, Richards and Needham feel that boys are penalized by science teachers in grading and rating where as girls are rewarded.

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<sup>17</sup>Robert Carter. "How Invalid are Marks Assigned by Teacher?" Journal of Educational Psychology. XLVIII (April, 1960) p. 218.

<sup>18</sup>Ibid.

<sup>19</sup>Victor B. Cline, James Richards, and Walter Needham. "Creativity and Achievement in High School Science." Journal of Applied Psychology. XLVIII (June, 1963) p. 188.

Many times the boys and the girls who are low achievers in science are left out of activities in the class because of their achievement level. Usually, when a science class is responsible for a science activity that is being viewed by the public, the very high achieving boys and girls in the class are selected to participate in the activity. It is clear that some of the low achieving boys and girls should be selected to work along with the high achieving boys and girls in order to develop an interest in science. The lack of interest is only one factor that affects the achievement level of boys and girls.

Giddings completed a study on "Factors Related to Achievement," in which he found that boys and girls in the high achieving group were members of, and participated in two or more science clubs.<sup>20</sup> Another factor according to Giddings, is that some boys and girls were able to achieve higher than others in science because these students had other books and magazines related to science that they were able to use.<sup>21</sup>

Sagness believed some boys and girls did poorly in science because in their homes there was no evidence of magazines or other books related to science other than

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<sup>20</sup>Morsley H. Giddings. "Factors Related to Achievement in Junior High School Science in Disadvantaged Areas of New York City." Reading in Science Education for Secondary Schools. ed. Hans O. Andersen (New York: Macmillan Company, 1969) p. 166.

<sup>21</sup>Ibid., p. 167.

textbooks. In many instances these were neatly tucked away in a closet.<sup>23</sup>

Teachers can have an effect upon boys' and girls' achievement level in science. A science teacher can teach a great deal through his behavior. Of course, every teacher has a right to play an honest role in the classroom. The teacher may admit that he is learning and that sometimes a child with a special interest and concentration may be learning faster than he is. In a real science class, scientific techniques are procedures of honesty, and neither teacher nor the child should be penalized or humiliated for being honest. If the teacher has an attitude which portrays that he dislikes science, then the boys and girls may develop this attitude. Some researchers do not like to support the idea that the sex of pupils makes a difference in their achievement level. McCurdy and Fisher indicate that sex differences are important in achievement but is it "the behavioral goals that enable a student to receive the immediate feedback of the effectiveness of the learning activities."<sup>24</sup>

In looking at the achievement of eighth grade boys

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<sup>23</sup>Richard Sagness. "General Education and Science Education: Supporting Pathways to the Future." Readings in Science Education for Secondary Schools. ed. Hans O. Andersen (New York: Macmillan Company, 1966) p. 166.

<sup>24</sup>Donald W. McCurdy and Robert L. Fisher. "A Program to Individualize Instruction in Chemistry and Physics." School Science and Mathematics. LXXL (June, 1971) p. 50.



and girls, many teachers do not like to consider grades because grading systems do not always indicate how much knowledge has been attained by these students. Williams did not like to look at boys' and girls' grades because they were not important.<sup>25</sup> Williams further admitted that achievement depended on the drive, ability, and interest of the students, and sex had nothing to do with achievement levels.<sup>26</sup>

Quite often boys and girls do not achieve well in science because they do not know how to relate activities in science with everyday life, furthermore, in many instances boys and girls find the vocabulary in science rather difficult to learn. Heiss said, "many of the science concepts and the accompanying vocabulary burdens are too difficult for the maturity level of junior high school pupils."<sup>27</sup>

Sagness pointed out that if teachers instilled in boys and girls the means of applying scientific methods in their daily activities, this would help to enhance the boys and girls interest and achievement level in science.<sup>28</sup> Furthermore, Barnard acknowledged the fact that "if science in the schools is to make a difference in the lives of boys and girls, it must become a personal satisfying experience

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<sup>25</sup>Statement by Oscar C. Williams, Personal Interview (March 12, 1972).

<sup>26</sup>Ibid.

<sup>27</sup>Elwood D. Heiss and Others. Modern Science Teaching. (New York: The Macmillan Co., 1965) p. 65.

<sup>28</sup>Sagness, p. 166.



for them.<sup>29</sup> In order for science to become a personal and satisfying experience for boys and girls; Sagness mentioned that teachers should use a variety of techniques in teaching science to junior high school boys and girls.<sup>30</sup>

Teachers, parents, and professors who try to improve instruction in the classroom find themselves in a trap because they want class members to share ideas but on tests pupils see their classmates as rivals who are trying to get the better of one another.<sup>31</sup>

The review of literature indicates that various individuals have different opinions regarding the achievement level of boys and girls. Some noted individuals believe that boys are able to achieve higher than girls because boys became more involved in science and they are able to break problems down into details and examine the details more carefully rather than to draw hasty conclusions. On the other hand, some individuals felt that girls achieved higher than boys because of the quality of their written work and assignments.

Other noted persons indicated that there are no differences in the achievement levels of boys and girls. However, some individuals do not like to evaluate achievement levels comparing boys and girls because they feel that drive and motivation of students are the determining factors

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<sup>29</sup>Darrel J. Barnard. "How Can Science Contribute to the Liberal Education of All Children." The Science Teacher. (November, 1966) p. 24.

<sup>30</sup>Sagness, p. 168.

<sup>31</sup>Herbert Thelen. "The Triumph of Achievement over Inquiry Education." The Elementary School Journal. 60; (June. 1960) p. 191.

and sex has nothing to do with achievement. Some individuals mentioned that interest is an essential key to achievement. If boys and girls are interested in science, these students work up to their capacity.

For science to become interesting to boys and girls, two things should be done: (1) teachers should use a variety of techniques when teaching science to a group of junior high school boys and girls, and (2) teachers should make science become interesting to boys and girls by showing them that science activities can be applied to everyday activities.

Interest and achievement can be enhanced by encouraging boys and girls to participate in activities related to science. The literature also revealed that some boys and girls participated in science activities and visited science laboratories, therefore, they were to achieve higher than those who were not able to engage in these activities.

## PRESENTATION OF DATA

In comparing the achievement for the seventeen boys and seventeen girls, the median was found for the percentile scores and grade equivalent, semester teacher made test, and semester laboratory reports.

The data collected from the SRA achievement test, first semester teacher made test, and first semester laboratory reports were organized for presentation and analysis. The data are presented in tabular form on the following pages. Table 1 presents the performance of the seventeen boys and the girls on the SRA achievement test.

TABLE 1

### A Comparison of Performance in Derived Scores SRA Science Test

SRA Percentiles		SRA Grade Equivalents	
Boys	Girls	Boys	Girls
96	80	11.4	10.1
91	77	11.2	9.7
88	75	11.2	9.4
87	73	10.5	9.1
77	54	9.1	8.5
67	38	8.5	6.4
49	28	8.1	6.4
49	28	7.7	5.4
49	17	7.4	5.3
47	16	7.2	5.3
38	12	6.8	5.1
38	9	6.6	4.7
34	9	6.3	4.4
19	7	5.8	4.4
12	1	4.6	4.3
4	1	4.1	4.1
3	1	4.0	4.0
Median			
49	17	7.4	5.3
N=17			

Eight of the seventeen boys have derived scores in percentiles that are above forty-nine; and eight of the seventeen girls have derived scores in the percentiles that are above seventeen. In percentiles, the range for boys is three to ninety-six. For girls, the range is one to eighty. In grade equivalents, eight of the seventeen boys have grade equivalents that are above 7.4. For girls, the grade equivalents indicated that eight of the seventeen girls have grade equivalents that are above fifth grade and third month. The range in grade equivalents for the boys is fourth grade to eleventh grade and fourth month. For girls, the range is fourth grade to tenth grade and first month.

Table 2 give the results of the seventeen boys and seventeen girls performance is raw scores on teacher made instruments.

TABLE 2

A Comparison of Performance in Raw Scores on Teacher Made Instruments

Semester Teacher Made Test		Semester Laboratory Reports	
Boys	Girls	Boys	Girls
96	96	80	88
80	84	75	82
79	80	66	80
69	79	64	77
65	73	55	74
65	72	54	73
63	70	40	71
59	65	35	65
59	64	32	56
58	60	30	53
53	56	27	48
42	54	26	42
40	53	25	38
38	51	11	38
30	37	10	36
25	25	10	29
24	23	8	29
59	64	32	56

The median for the seventeen boys on the teacher made test is fifty-nine; and, the median for the seventeen girls is sixty-four. Thus, it can be said that eight of the seventeen boys have scores that are above fifty-nine; and, eight of the seventeen girls have scores that are above sixty-four. The range for boys on a teacher made test is twenty-four to ninety-six, and the range for girls is sixty-four to ninety-six. On the semester laboratory reports, the median for the boys is thirty-two; and, the median for the seventeen girls is fifty-six. Therefore, it can be stated by the researcher that eight of the seventeen boys had scores that were above thirty-two and eight of the seventeen girls had scores that were above fifty-six. The range for the boys is thirty-two to eighty, and it is fifty-six to eighty-eight for the girls.

## SUMMARY, CONCLUSIONS, AND DISCUSSION

Science is one of the subject areas in school in which the boys' achievement levels are higher than the girls'. Therefore, the researcher decided to make a comparison of eighth grade boys' and girls' achievement levels in science. Answers for the following questions were sought: (1) Do boys achieve higher than girls on the SRA Achievement? (2) Do boys achieve higher than girls on the semester teacher made test? and (3) Do boys achieve higher than girls on the semester laboratory reports?

This study is important to educators because science is an area in which continuous growth is needed. If boys achieve higher than girls the classroom teachers need to make changes in their teaching techniques so science can be appealing to both boys and girls.

In this study achievement was defined as performance on the SRA achievement test in the area of science, performance on semester teacher made test, and performance on semester laboratory reports during the fall year of 1971.

The population was a group of thirty-four pupils, seventeen boys and seventeen girls in one of the regular eighth grade classes of Grambling College laboratory school in Grambling, Louisiana. The population used in this study was totally black and had an age range of thirteen and one-half to fourteen. Many factors such as intelligence

quotient, sociological, economic, and environmental conditions were omitted, thus preventing the researcher from making a more valid and reliable comparison of achievement.

In comparing the achievement of the seventeen boys and seventeen girls, the median was found for the percentile scores, grade equivalents, a semester teacher made test, and semester laboratory reports.

The percentile scores and grade equivalents had been plotted by the counselor; therefore, Science Research Associates, Inc.' achievement scores in science were accepted as valid indices of academic achievement. In addition, the semester teacher made teacher made test scores and semester laboratory reports were tabulated from the teacher grade book. With the Science Research Associates, Inc. achievement scores and teacher made instruments scores, charts were constructed on blank sheets of paper showing pupils names and scores.

The findings from this study revealed that the seventeen boys on the Science Research Associates, Inc. achievement test had achieved higher than the seventeen girls, but on the semester teacher made test and laboratory reports the girls achieved higher than the boys. It can be concluded that boys have a higher level of achievement than girls if one accepts the Science Research Associates, Inc. achievement test as a valid and reliable instrument for measuring achievement in science. On the other hand, if one accepts the idea that the teacher made instruments provide

a valid and a reliable measurement of achievement then girls achieved higher than boys.

The results of pupils' achievement can be determined in many different ways. Pupils' achievement can be indicated by scores or letter grades, by oral or written statements, or by any combination of such methods. There is a general agreement that the teachers' marks are often unreliable and invalid indexes of growth. The marks may be in the form arithmetical values or alphabetical values and they are not only used in science courses but other courses too. Marks given by some classroom teachers can have great value because they may indicate the actual achievement of pupils. On the other hand, marks may only mean nothing more than that the pupils have official permission to forget what they have learned. In either case they seem likely to be the principal basis for awards, promotion and placement in schools. For a long time to come parents will accept them as the basis for determining pupils' achievement.

A single mark in a science class cannot indicate to pupils the points on which they need to improve. Marks in science can indicate no next steps for boys and girls, their parents or their future teachers, especially if they are not valid measurement of the boys' and girls' achievement. Marks received in science by boys and girls are simply the judgment of the science teacher, and they are possibly affected by unrelated matters. Marks given by science teachers usually average out judgments about various



elements in the boys and girls achievement so that meaning and value are lost. Marks usually cause harm by increasing senseless competitiveness among pupils.

A standardized test is one way in which science teachers can use to get a measurement of boys and girls achievement in science. Standardized tests can give a broader view of boys' and girls' achievement in science; however, many standardized tests have indicated that there is a great need for improvement in the tests. Nevertheless, standardized tests can give a more valid and reliable measurement of boys and girls growth in science than the teacher made tests.

Teacher made instruments can also be used to measure boys' and girls' achievement in science. These instruments can be objective as well as subjective. The so called "objective test" is really a subjectively constructed test that is objectively scored. The actual writing of test items is a subjective process. In this instance, the science teacher must choose the form of items to use, he must decide on the materials he will sample, he must make judgments about whether or not an item is worthy of inclusion, and the science teacher must select the scoring scheme. Poor construction of teacher made instruments can affect boys' and girls' achievement in science.

Teacher made, objectively scored tests may involve simple recall of information by requiring the pupils to complete sentences or to fill in blanks. Science teachers

may also use recognition test of true - false, multiple choice, or matching varieties. At first glance, these tests seem easy to prepare but the construction of a really good objectively test in science is a difficult process if certain pitfalls are to be avoided and the full merits of these tests are to be obtained.

The essay test is another form of teacher made instrument that is used to measure achievement in science; however, many science teachers do not like to use essay tests because they lack validity and reliability. Those science teachers who use badly and hurriedly prepared essay tests get little merit and get false impressions of boys' and girls' achievement. Essay tests are good to measure achievement in science if the science teacher is concerned with boys' and girls' achievement in recognizing relationships, expressing ideas, or analyzing and synthesizing information. Scoring essay tests will be significantly improved if the questions have been worded so that the science teacher can prepare in advance a list of important questions.

As the school year proceeds, the science teacher should help each boy and girl to recognize the points on which they need to improve and to suggest the next steps to them. Science teachers should examine their own biases and prejudices for or against particular kinds of pupils and guard against them in making their appraisals. Science teachers should make it clear by words and action that their classrooms can be cooperative as well as comparative.

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A COMPARISON OF EIGHTH GRADE BOYS' AND GIRLS' ACHIEVEMENT  
IN SCIENCE AT GRAMBLING LABORATORY SCHOOL  
GRAMBLING, LOUISIANA

by

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## ABSTRACT

This survey was an attempt to determine the achievement level of a group of eighth grade boys and girls in the area of science. Achievement level was defined as the performance of students on the SRA Achievement Series, a teacher made test, and laboratory reports.

The population was a group of eighth grade boys and girls from the Grambling Laboratory School, Grambling, Louisiana. The population consisted of 34 pupils, 17 boys and 17 girls. The population was totally black and had an age range of 13.5 to 14.

In this survey, the data was compiled from the SRA Achievement Series in the area of science. The science area of the SRA Achievement Series had been plotted by the counselor; therefore, it was accepted as valid indices for science achievement for the group of eighth grade boys and girls. In addition, data was assembled from the grade book containing the semester grades of a teacher made test and laboratory reports. The researcher tabulated scores for each boy and girl in percentiles and grade equivalents from the SRA Achievement Series, from scores on the teacher made test, and from laboratory reports.

The findings from this survey revealed that the 17 boys on the SRA Achievement test had achieved higher than the 17 girls, but on the semester teacher made test and

laboratory reports the girls achieved higher than the boys.

In conclusion, it can be stated that boys achieved higher than girls if one accepts the SRA standardized test as a valid and reliable instrument for measuring achievement in science. On the other hand, if one accepts the idea that the teacher made instruments provide a valid and a reliable measurement of achievement then girls achieved higher than boys.

In order to secure a more valid statement of boys' and girls' achievement in science the researcher suggests that further studies are needed which focus upon the achievement level of eighth grade boys and girls.