A R T A S I T R E L A T E S T O
H O M E M A K I N G

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF SCIENCE IN HOME ECONOMICS
EDUCATION IN THE GRADUATE SCHOOL OF
THE TEXAS WOMAN'S UNIVERSITY

COLLEGE OF
HOUSEHOLD ARTS AND SCIENCES

BY

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We hereby recommend that the thesis prepared under our supervision by Martha Dee Thompson entitled ART AS IT RELATES TO HOMEMAKING

be accepted as fulfilling this part of the requirements for the Degree of Master of Science

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A C K N O W L E D G M E N T S

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I N T R O D U C T I O N

"The home economist can be a creative force in the classroom. No other academic area offers as much potential for artistic expression as does home economics." Thus Dommelen (7) has emphasized the importance of the art in homemaking. Homemaking teachers have the responsibility of teaching students to develop artistic principles in homemaking.

Dommelen (7) further stated that to develop any program without using the contributions in the related art department is the same as preparing an unfinished curriculum. Related arts are concerned with all areas of study in home economics; therefore, home economics departments should be staffed with teachers with training in the field of art in order to prevent weak programs.

Goldstein (13) declared that art is a part of the objects seen and used everyday. An outstanding need of the consumer is to gain an understanding of the principles fundamental to good taste.

t tions n building a related art program. Firs , t er should be conscious of class situations that affor ities to discuss and use related art principles e ond, the teacher should bring art principles forcibly to the minds of the students by good, positive teaching, and third, the teacher should collect and use materials which demonstrate art principles.

O'Donnell (25) suggested that art is an inner spring of creativity and is involved in home economics at all levels. The art of creativity is found in many places, in college, in family life, in childhood, and in adulthood.

Art in home economics is of special interest to many teachers of homemaking courses. The writer hopes to find by objective methods the relation of art attitudes and aptitudes to home economics.

The specific purposes of the study will be to:

1) determine interest differences in students after a year's work in the homemaking program;

2) compare various scores of high natural ability individuals and of low natural ability individuals; and to

3) determine artistic aptitude differences in students after a year's work in the homemaking program.

NOL

Tes were sed me a for determining the importance of art in homemaking; therefore, certain general terms need to be defined. Three important terms as used in this study are:

Art: the ability to create objects of beauty.

Aptitude: the person's ability or talent which can be developed through training. An aptitude test reveals an individual's ability to learn and to perform skills in the future. A person taking these tests later would probably score about the same according to the Student's Booklet of the Flanagan Aptitude Classification Tests (11).

Interest: preferences show an individual's liking for certain activities. Preferences help to identify promising occupations, but they must be supplemented with some ability.

REVIEW OF LITERATURE

The review of literature is concerned with the examination of data related to the importance of art interest and art ability in home economics; measurement of art, both statistically and visually; artistic aptitude in home economics; evaluation of art in home economics; and the importance of developing art awareness in home economics.

Bonsett (2) stressed that art interest was aroused by arranging bulletin boards on art reproductions. Lettering was done by students who volunteered to help with the

bulle n a r class was stimulated when students d e letteri Activities of the students revealed n ceable artistic characteristics.

Meier (21) contended that a person usually shows an interest in doing work or activities requiring good eye-hand coordination very early in life. Individuals with artistic aptitude are usually particular and have interest and pride in doing things well.

Barton (1) pointed out that through art a child is given an opportunity for discovery as a capable, creative person. The pupil's growth through art may be expressed by the increased ability to think and plan independently, increased insight, understanding and tolerance of others' ideas and expressions, development of imaginative ways to express ideas, and continuous growth in attitudes and skills.

Bumpass (4) revealed from the data in comparing retarded children and regular classroom students that there was considerable similarity between the art abilities of this sample. Some of the regular classroom students produced art work below their specific age level.

Shipman (27) indicated that students showed ability in applying art principles. Students also gave evidence of some skill in selecting articles of beauty and good design after

study. S ip n further ted that practice was necessary in order to develop skills in using and applying art principles. This study brought out the fact that the students had more ability in recognizing statements about color, rhythm and texture than statements about balance.

Daude (6) explained that finger painting, a form of art, provided the child with an ability to express through art feelings that could not be spoken. This study further indicated that certain personality traits were developed.

Art cannot be measured statistically, according to True (30). Art is completely intangible and is never in the same state of existance as it was the minute before. But Graves (15) emphasized that a sense of design can be appraised, evaluated and tabulated by means of a test. A test developed by Graves was used in this study.

Brockman (3) stated that unity of design is important and that good taste is the instinctive recognition of "what goes with what"; the ability to discern with the eye new combinations. Some individuals are more sensitive to good combinations than others. Persons are helped to establish confidence through practice in selecting desirable combinations using design principles.

Authorities generally agreed that art was an important part of home economics. Art, as explained by Barton (1),

motiva c curriculum, stimulates the child's exper of crea and helps improve the manner in which the pupil expresses feelings. By integrating creative art experiences into the homemaking plans, curriculum can be made more meaningful. Barton also pointed out that creativity through art activities may guide the child into making visual aid devices.

Goldstein (13) expressed the importance of art in home economics by pointing out that art is a part of the daily living. Art can help an individual to do more beautifully the simple, homely things of life as well as the unusual. Goldstein suggested that art can become a part of living and personality; individuals can learn to enjoy art in everything seen or selected.

True (30) contended that students should be artistically educated for their own enjoyment and for providing an environment suitable for family living. Such training is really needed today. The importance of art is further ascertained by True who stated that the arts play a major part in man's environment, house, and community. The arts, from this point of view, include not only the house but also clothing.

The study by Forst (12) on design decisions of women in later life revealed important group differences according to various types of training in college. Forst further

observed i e given to these g s
when planning des gn co i fferent fields of studies.
For art majors, social s well as self-expression
and esthetic value sho stressed. Home economics
should stress creativity emp ing function and practical
design. Art design should be emphasized to help prepare for life after college graduation even for women without training in home economics or art.

Kinsey's (17) study revealed that teaching units which include application of facts to life situations will in part help students use knowledge of color, design, and fabric in wardrobe selection. In the Kinsey study, great importance was given to identifying color due to the fact that students understood the meaning of the term hue.

Stryker (29) pointed out that through the study of art the individual gains a great deal of knowledge and understanding. Through experiences with art, the student also learns to recognize and appreciate art in his surroundings.

Haynie (16) recommended that every student have knowledge and principles in order to have a secure feeling in new art situations. Haynie further pointed out that principles of arrangement are used in all forms of art.

True (30) pointed out that one of the roles of art in home economics is for professional application. Students

should be given train g ast one art area so as to be able to use art i tions or to develop it as a profession. Decoration e is one of the homemaking professions which uses art, an area including all sorts of designing: furniture design, and other work connected with interiors.

In summarizing the 1962 conference on art in home economics, O'Donnell (25) stated that those present at the conference were in agre ement on the following four points:

1) Art has a proper place in home economics because home economics is partly art.

2) Art in home economics is a creative activity that will enrich an individual's life.

3) Art in home economics makes it possible for a student to create a product.

4) The aim of art in home economics is to develop art in creative living rather than to develop the fine arts.

Riley (26) implied that the teacher's job is to stimulate imagination and awareness as essentials to successful living. An appreciation of beauty wherever it is found should also be developed.

Some conclusions that may be drawn from the studies reviewed concerning art in home economics are as follows:

1) Art should play a part in an individual's everyday life.

2 will help pro-
ta le for family living.

tatistically, but a
ig be appraised, evaluated,
d s of tests.

4) Ar istic a lves good eye-hand co-
ordination.

5) Students s ned in at least one
art area so as e able to use it in home-
making.

6) Fine arts is not he aim of art in homemaking courses but creativity in art is needed for everyday living.

U E

An inve iga o as related to home economics was conducted by the o collecting data from 50 Homemaking II and Homemakin I students in high school. Students in Nocona High School, Nocona, Texas, Saint Jo High School, Saint Jo, Texas, and Prairie Valley High School, Route 3, Nocona, Texas, participated in the study during the school year 1967-1968. The students' mean age was 16.33, with a range from 15 through 18 years of age.

INSTRUMENTS

Three specific instruments of measurement were used to determine art as related to home economics. The instruments were the Kuder Preference Record, Form CH, Flanagan Aptitude Classification Tests, and Graves' Design Judgment Test.

The Kuder Preference Record, Form CH

The Kuder Preference Record, Form CH consists of 504 items arranged under 10 broad headings. The 10 broad headings are: outdoor, mechanical, computational, scientific, persuasive, artistic, literary, musical, social service, and

cler of occupations
in the re Manual (18),
the following in re luded: artistic, outdoor,
mechanical, and so . Since these four interests
are involved in hom aki ning, those were the interests
checked on the Kuder Test given to Home
making II and Homemaking III students to determine artistic interest.

Definitions of specific interest tests used in this instrument are as follows:

1) Artistic interest means a person likes to do creative work involving the use of the hands. Creative work usually is work that has "eye appeal." This type of work involves design, color, and materials. Painters, sculptors, architects, dress designers, hair dressers, and interior decorators all do "artistic" work.

2) Outdoor interest means that an individual prefers work that is outside most of the time. According to the Kuder Preference Record Administrator's Manual (18) the outside-artistic includes such professions as landscape architect and floral designer.

3) Mechanical interest means a person likes to work with machines and tools of all sorts. Mechanical-artistic professions are such professions as artist, sculptor, teacher of art, teacher of home economics, designer such as industrial designer, toy designer, dressmaker, tailor, and upholsterer.

4) Social service interest indicates a person desires to help people. These professions are home demonstration agent, home economics expert and a miscellaneous teacher: knitting or painting instructor.

e , was a s -scoring test. The scoring wa a student counting holes punched on the an ich indicated the preferences on each interest test. nches, raw scores, were recorded on the individua 's profile sheet.

The Flanagan Aptitude Tests

The Flanagan Test contains 19 skills for measuring an individual's natural aptitude. These 19 skills are essential in order to be a success in 37 occupational areas. The skills evaluated by the Flanagan Aptitude Classification Test are: 1) inspection; 2) mechanics; 3) tables; 4) reasoning; 5) vocabulary; 6) assembly; 7) judgment and comprehension; 8) components; 9) planning; 10) arithmetic; 11) ingenuity; 12) scales; 13) expression; 14) precision; 15) alertness; 16) coordination; 17) patterns; 18) coding; and 19) memory.

According to the Students' Booklet on the Flanagan Aptitude Classification Tests (11), to have aptitude in art, a person would need to do well in 1) inspection, 2) vocabulary, 3) assembly, 4) ingenuity, 5) coordination, 6) patterns, and 7) memory.

The author of this study had observed that students who did well in homemaking often did well in 1) mechanics, 2) precision, and 3) components (other tests included in the 19 Flanagan Aptitude Classification Tests). These three tests

were add e s s

art aptitude in ome a ng III.

Defin de tests are as

follows:

1) Inspec i ity to spot flaws or imperfec n in es quickly and accuratel

2) Vocabulary ability to select the right word in ey an idea.

3) Assembly is ity to "see" how an object looks when put to ther according to instructions. The person can see the appearance of an object from many different parts.

4) Ingenuity is the creative skill a person possesses.

5) Coordination is the ability to use the hands and arms.

6) Patterns is the ability to reproduce simple pattern outlines in an accurate way. Part of the test required the ability to draw a pattern as it should look upside down.

7) Memory is the ability to remember codes and the ability to memorize that which is printed.

8) Mechanics is the ability to understand mechanical principles and to analyze mechanical movements.

9) Precision is the speed and accuracy in using one hand or both hands working together with small objects.

10) Components is the ability to select important parts of a whole.

The Flanagan Aptitude Classification Tests were machine graded. The indivi est scores were reported by percentiles.

Graves' De

Gra) ins 90 se s of two- and thr ns be appraised by individuals. The test meas r appreciation or production of art or rea arning in the field of visual art. This tes ministered and time was not limited. Most indiv s d the test in 20 to 30 minutes.

Raw scores on e esign Judgment Test were obtained from the nu r i which were marked correctly according to the hand scoring key. The maximum score on the test was 90. Raw scores were used for comparison of the test and retest. The percentile equivalents of the scores were used in ranking of the natural aptitude percentiles of the Flanagan Aptitude Classification Tests.

COLLECTION OF DATA

The scores on the Kuder Preference Record, Form CH and Flanagan Aptitude Classification Tests were obtained from the cumulative files in the counselor's office in the three schools. These two tests were administered by one individual, the counselor for the three schools.

In February, the Graves' Design Judgment Test was given to the students enrolle in Homemaking II and III in the

Nocona i
High Sc
making tea e
students chec
tions were ma
of the scores would
courses.

Prair Valley
class periods by the home-
ls. Before the
Test, explana-
time limit and the results
grades for homemaking

In May, a re on the Kuder Preference Record, Form CH and the Graves' Design Judgment Test. The retests were given in each of the three schools by the respective teachers.

Raw scores were used from the Kuder Preference Record, Form CH and Graves' Design Judgment Test for statistical analysis. The percentile score was used for analysis of the Flanagan Aptitude Classification Tests.

ANALYSIS OF DATA

Test and retest scores for each test, outdoor, artistic, mechanical, and social service, were compared on the Kuder Preference Record, Form CH.

1) Comparison of the test and retest for outdoor interest.

2) Comparison the test and retest for artistic intere t.

3) i of

4) a se retest of the

Each test was compa y by the use of the t-test and tabulated.

The data collec na n Aptitude Classification Tests were in rcentiles. The top 12 and the lower 12 ed and compared, and the tests were ranked with udents' Graves' Design Judgment Test percentil omparison was summarized by the use of a simplified e. The scores above fiftieth percentile were give a plus (+); and scores below fiftieth percentile were given a minus (-). Data were tabulated for analysis. The rank percentiles on the Flanagan Aptitude Classification Tests were compared with the rank percentiles of the top 12 and the lower 12 students' scores on the Graves' Design Judgment Test.

The raw scores of the pre-test and retest of the Graves' Design Judgment Test were compared by the use of a t-test and tabulated. Polygons were also used to further show the comparison of the pre-test and retest.

, A N D

This study d the relationship between interest and a art as it is related to home economics. The students te sts, natural aptitude and art aptitude were measured on standardized forms of the Kuder Preference Record, Form CH (18), Flanagan Aptitude Classification Tests (9), and Graves' Design Judgment Test (11).

Respondents were enrolled in two different levels of high school home economics, Homemaking II and Homemaking III. For the purpose of analysis scores were grouped together as one group of home economics students. The discussion of this study will summarize the findings obtained from scores of the three instruments and comparisons of various scores.

KUDER PREFERENCE RECORD, FORM CH

To provide a means of achieving the first purpose, that of determining interest differences after a year's work in home economics, data from the Kuder Preference Record, Form CH were used in determini the difference in interest as it relates to art.

gs systemati-

cally ar eferences. The

test rev a e s s an ndication of

suitable v

Pup scor interest areas of the

Kuder Preference were calculated by the use

of a t-test. T find f the t-test were tabulated and

are shown in Table I.

Table I reveals that the pupils' interests--outdoor, mechanical, artistic, and social service--were non significant at the .05 level. Analysis of differences between the test and retest indicated that the interests of the students did not change significantly after a semester's study in homemaking.

FLANAGAN APTITUDE CLASSIFICATION TESTS

Data from the Flanagan Aptitude Classification Tests were used as a basis for achieving the second purpose, that of comparing various scores of high natural ability individuals and various scores of low natural ability individuals. Nineteen areas for measurement of natural aptitude are included in this test and percentiles from 10 of the areas were used from the tests: 1) inspection, 2) vocabulary, 3) assembly, 4) ingenuity, 5) coordination, 6) patterns, 7) memory, 8) mec ani s, 9 recision, and 10) components.

TABLE I

COMPARISON OF RAW SCORES OF 50 HOMEMAKING STUDENTS ON KUDER PREFERENCE RECORD, FORM CH TEST AND RETEST

	T st Com r	st c	e o can
Outdoor	Test and r test on st		
Mechanical	Test and retest on ical In	- .138	
Artistic	Test and retest on t	-0.179	98 n.s.
Social Service	Test and retest on al ce I	0.762	98 n.s

n.s. non-significant

wer for
compa a comparison of
the two ou g highest above the
fiftiet per ts ranking the lowest
below the f

F arisons in Figure I indi-
cated that n the fiftieth percentile
on the l l of the Flanagan Aptitude
Classification high aptitude for natural
artistic abil in n sts, inspection, vocabu-
lary, assemb in ination, patterns, memory,
mechanics and compo number of students in
this group ranked a the fiftieth percentile of
precision.

In Figure f students below the fiftieth
percentile on aptitude tests of the Flanagan
Aptitude Cla ts are shown. These lower ranking
students showed a very low aptitude for natural artistic
ability. Students below the fiftieth percentile ranked low
in seven of the 10 tests; inspection, assembly, ingenuity,
patterns, mechanics, precision, and components. The same
number of students this group ranked above and below the
fiftieth percenti e ocab lary and memory. Eleven of these
students ranked h o co ion, indicating good use of

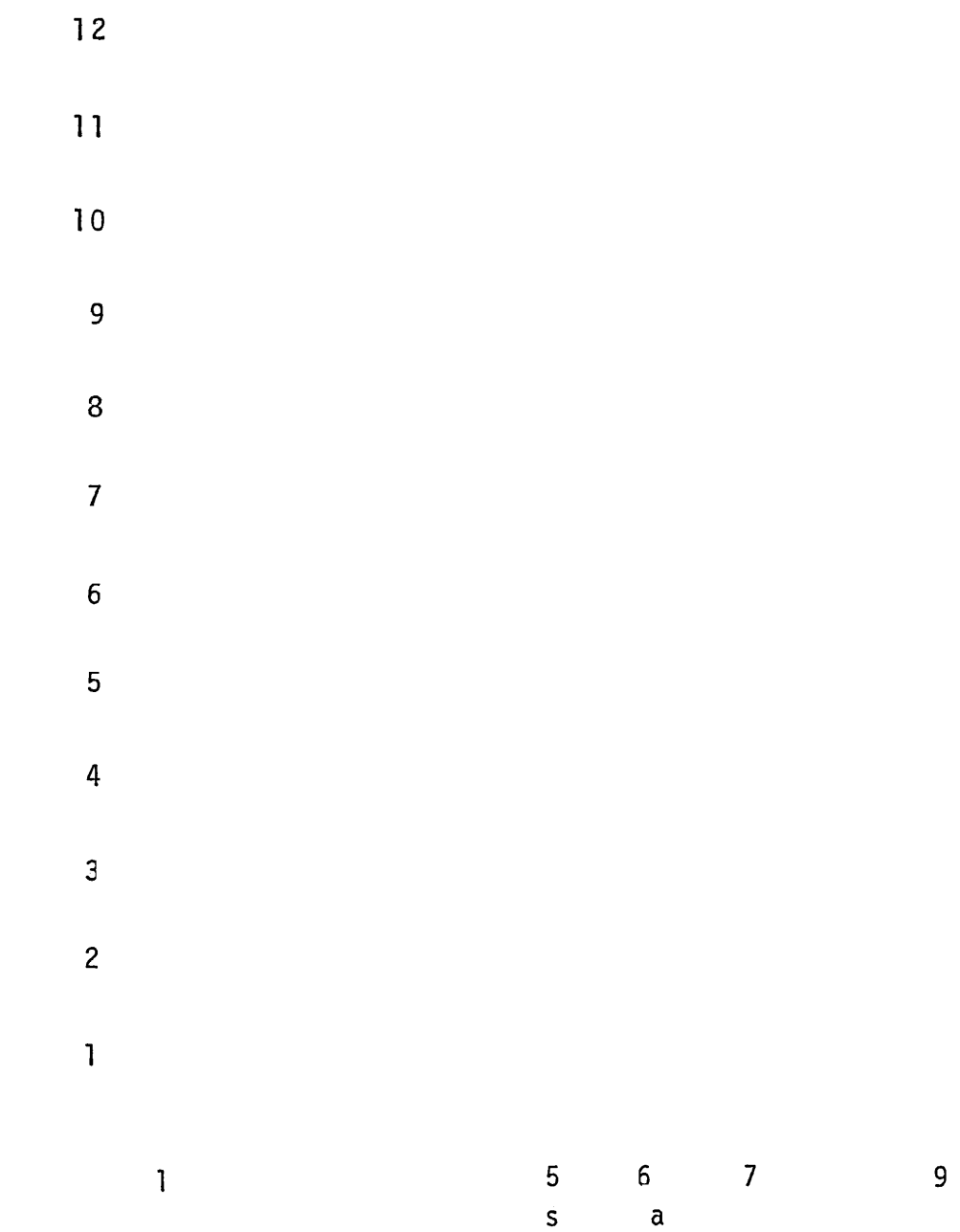

Figure 1

Percentage of 12 Top Ranking Students with Percentile Ranks Above or Below the Fiftieth Percentile Rank in 10 Areas on the Flanagan Aptitude

ass tion Tests

1

11

1

7

1

0

Above 50th centile

Below 50th centile

Figure 2

Percentage of 12 Low Ranking Students with Percentile Ranks Above or Below the Fiftieth Percentile Rank in 1 Areas on the Flanagan Aptitude

la ficati n Tests

hands and th these dents
ranking bel could do well artis-
tically wh n an olved.

T a a top 12 students on the Flanagan Aptitude C Tests were observed by ranking with the Graves' Design Judgment Test percentiles. The findings indicated that these students ranking high on Flanagan Aptitude Classification Tests also ranked high on Graves' Design Judgment Test. The findings further indicated that high natural aptitude was important in students' artistic ability (Tables II, IV, VI, VIII, X, XII, XIV, XVI, XVIII, and XX).

Students below the fiftieth percentile on the Flanagan Aptitude Classification Tests were also ranked and observed with the students below the fiftieth percentile on the Graves' Design Judgment Test. The findings on the ranks of these two tests after observation indicated that these students were low in all but one of the natural aptitude tests revealing low aptitude for artistic ability (Tables III, V, VII, IX, XI, XIII, XV, XVII, XIX, and XXI).

GRAVES' DESIGN JUDGMENT TEST

The third purpose, that of determining the difference in artistic aptitude of students after a semester's work in home economics, was a ieved through data from the Graves'

COMPARI ON THE 12 STUDENTS RANKING

HIGH ON TESTS,

A C S FOR GRAVES DESIGN

DGM

Student ber	Flana an Classi ca n Tests	Design Judgment Test
1		+
2		+
14		+
26		+
27		+
32		+
7	+	-
8	+	+
48	-	-
42	+	+
9	+	-
3	-	+

Area I--Inspection Aptitude
+ = Above 50th centile
- = Below 50th centi e

COMPARIS OF E KS OF THE 12 STUDENTS RANKING LOWEST ON AGA CLASSIFICATION TESTS, AREA I WITH PERCENTILE RANKS FOR GRAVES DESIGN JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area I	Design Judgment Test
15	+	+
19	-	-
43	-	+
18	-	+
45	-	+
47	-	-
20	-	-
17	-	+
40	-	-
35	-	-
23	-	+
22	-	-

Area I--I ection Aptitude
+ = Above cen il
- = Below 5 c

COMPA ERC KS OF THE 12 STUDENTS RANKING HIGH CLASSIFICATION TESTS, AREA II ITH PERCENTILE RANKS FOR GRAVES DESIGN JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area II	Design Judgment Test
1	+	+
2	+	+
14	+	+
26	+	+
27	+	+
32	+	+
7	+	-
8	+	+
48	+	-
42	+	+
9	+	-
3	+	+

Area II--Vocabulary Aptitude
+ = Above 50th centile
- = Below 50th centile

COMPA THE 12 STUDENTS RANKING

L T TESTS,

KS FOR GRAVES DESIGN

TEST

Student Num	Flanagan A tude Classific	Design Judgment Test
15	+	+
19	-	-
43	+	+
18	-	+
45	-	+
47	+	-
20	+	-
17	-	+
40	-	-
35	-	-
23	+	+
22	-	-

Area II--Vocabulary titude
+ = Above 50th centile
- = Below 50th tile

I

COMPARISON ERCENTIL OF THE 12 STUDENTS RANKING HIGHEST CLASSIFICATION TESTS, AREA III E ANKS FOR GRAVES DESIGN TEST

Student	Clas	an Aptitude cation Tests III	Design Judgment
1			+
2			+
14		+	+
26		-	+
27		+	+
32		-	+
7		+	-
8		+	+
48		-	-
42		+	+
9		+	-
3		+	+

Area III--Assembly Aptitude
+ = Above 50th centile
- = Below 50th centile

COMPARISON OF P TILE RANKS OF THE 12 STUDENTS RANKING LOWEST ON FLANAGAN APTITUDE CLASSIFICATION TESTS, AREA III WITH PERCENTILE RANKS FOR GRAVES DESIGN JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area III	Design Judgment Test
15	-	+
19	-	-
43	+	+
18	-	+
45	-	+
47	-	-
20	+	-
17	-	+
40	-	-
35	-	-
23	+	+
22	-	-

Area III--Assemply Aptitude
+ = Above 50th centile
- = Below 50th centile

COMPARISO KS OF THE 12 STUDENTS RANKING HIGHEST ON SI ION TESTS, AREA IV WITH PERCENTILE RANKS FOR GRAVES DESIGN JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area IV	Design Judgment Test
1	+	+
2	+	+
14	+	+
26	+	+
27	+	+
32	+	+
7	+	-
8	+	+
48	+	-
42	+	+
9	-	-
3	+	+

Area IV--Ingenuity Aptitude
+ = Above 50th centile
- = Below 50th centile

COMPARISON PERCENTI OF THE 12 STUDENTS RANKING LOWEST ON FLANAGAN APTITUDE CLASSIFICATION TESTS, AREA IV WITH PERCENTILE RANKS FOR GRAVES DESIGN JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area IV	Design Judgment Test
15	+	+
19	-	-
43	-	+
18	-	+
45	+	+
47	-	-
20	+	-
17	-	+
40	-	-
35	-	-
23	-	+
22	-	-

Area IV--Ingenuity Aptitude
+ = Above 50th centile
- = Below 50th centile

COMPARISON OF THE 12 STUDENTS RANKING HIGHES D CLASSIFICATION TESTS, AREA V P KS FOR GRAVES DESIGN TEST

Student Number	Flanagan Aptitude Classification Tests Area V	Design Judgment Test
1	+	+
2	+	+
14	+	+
26	+	+
27	+	+
32	+	+
7	+	-
8	+	+
48	+	-
42	+	+
9	+	-
3	+	+

Area V--Coordination Aptitude
+ = Above 50th centile
- = Below 50th centile

XI

COMP F THE 12 STUDENTS RANKING

LOW CLASSIFICATION TESTS,

AREA KS FOR GRAVES DESIGN

TEST

tudent	Flan an Classi i	e Tests	Design Judgment
15			+
19			-
43			+
18	+		+
45	+		+
47	+		-
20	+		-
17	+		+
40	-		-
35	-		-
23	+		+
22	+		-

Area V--Coordination Aptitude
+ = Above 50th centile
- = Below 50th centile

COMP I PERCE KS OF THE 12 STUDENTS RANKING HIGHEST ON AG CLASSIFICATION TESTS, AREA VI KS FOR GRAVES DESIGN TEST

Student Number	Fla an de Classi n Are	Design Judgment t
1	+	+
2	+	+
14	+	+
26	+	+
27	-	+
32	+	+
7	+	-
8	-	+
48	+	-
42	-	+
9	-	-
3	+	+

Area VI--Patterns Aptitude
+ = Above 50th centile
- = Below 50th centile

II

COMPARISON O P S OF THE 12 STUDENTS RANKING LOWEST ON CLASSIFICATION TESTS, AREA VI WITH PERCENT KS FOR GRAVES DESIGN JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area VI	Design Judgment Test
15	-	+
19	+	-
43	-	+
18	+	+
45	-	+
47	-	-
20	-	-
17	+	+
40	-	-
35	+	-
23	-	+
22	-	-

Area VI--Patterns Aptitude
+ = Above 50th centile
- = Below 50th centile

COMPARISON O P RC OF THE 12 STUDENTS RANKING HIGHEST ON FLANAGAN CLASSIFICATION TESTS, AREA VII WITH P RANKS FOR GRAVES DESIGN U M TEST

Student	Flanagan Ap itude Classificati Tests	Design Judgment
1		+
2	+	+
14	+	+
26	+	+
27	+	+
32	+	+
7	-	-
8	+	+
48	+	-
42	+	+
9	+	-
3	+	+

Area VII--Memory Aptitude
+ = Above 50th centile
- = Below 50th centile

V

COMPARISON OF P KS OF THE 12 STUDENTS RANKING LOWEST ON F CLASSIFICATION TESTS, AREA VII WITH PERCENTILE RANKS FOR GRAVES DESIGN JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area VII	Design Judgment Test
15	+	+
19	+	-
43	-	+
18	-	+
45	+	+
47	-	-
20	-	-
17	-	+
40	-	-
35	-	-
23	-	+
22	-	-

Area VII--Memory Aptitude
+ = Above 50th centile
- = Below 50th centile

COMP OF THE 12 STUDENTS RANKING

HIGH CLASSIFICATION TESTS,

A A III WITH RANKS FOR GRAVES

UDGME TEST

Student Number	Flanagan Classification Tests	Design Judgment
1		+
2		+
14	-	+
26	+	+
27	-	+
32	+	+
7	-	-
8	+	+
48	+	-
42	-	+
9	-	-
3	+	+

Area VIII--Mechanics Aptitude
+ = Above 50th centile
- = Below 50th centile

R OF THE 12 STUDENTS RANKING

E CLASSIFICATION TESTS,

V E RANKS FOR GRAVES

TEST

Student Number	Flanagan Aptitude Classification Tests Area VIII	Design Judgment Test
15	+	+
19	+	-
43	-	+
18	-	+
45	+	+
47	-	-
20	-	-
17	-	+
40	-	-
35	-	-
23	-	+
22	-	-

Area VIII--Mechanics Aptitude
+ = Above 50th centile
- = Below 50th centile

COMPARI E OF THE 12 STUDENTS RANKING HIGHEST ON CLASSIFICATION TESTS, AREA IX WITH PERC NTILE RANKS FOR GRAVES DESIGN JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Ares IX	Design Judgment Test
1	-	+
2	-	+
14	-	+
26	+	+
27	+	+
32	+	+
7	+	-
8	-	+
48	+	-
42	-	+
9	+	-
3	-	+

Area IX--Precision Aptitude
+ = Above 50th centile
- = Below 50th centile

P R OF THE 12 STUDENTS RANKING

0 APTITUDE CLASSIFICATION TESTS,

WI TILE RANKS FOR GRAVES DESIGN

JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area IX	Design Judgment Test
15	-	+
19	-	-
43	-	+
18	+	+
45	-	+
47	+	-
20	+	-
17	-	+
40	-	-
35	-	-
23	-	+
22	+	-

Area IX--Precision Aptitude
+ = Above 50th centile
- = Below 50th centile

XX

COM R F R RANKS OF THE 12 STUDENTS RANKING

O CLASSIFICATION TESTS,

WITH PERCENTILE RANKS FOR GRAVES DESIGN

JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area X	Design Judgment Test
1	+	+
2	+	+
14	+	+
26	+	+
27	-	+
32	+	+
7	+	-
8	+	+
48	+	-
42	+	+
9	+	-
3	+	+

Area X--Components Aptitude
+ = Above 50th centile
- = Below 50th centile

I

COMPARISON OF PERCENTI E RANKS OF THE 12 STUDENTS RANKING LOWEST ON FLANAGAN APTITUDE CLASSIFICATION TESTS, AREA X WITH PERCENTILE RANKS FOR GRAVES DESIGN JUDGMENT TEST

Student Number	Flanagan Aptitude Classification Tests Area X	Design Judgment Test
15	-	+
19	-	-
43	-	+
18	-	+
45	-	+
47	+	-
20	-	-
17	+	+
40	-	-
35	+	-
23	-	+
22	-	-

Area X--Components Aptitude
+ = Above 50th centile
- = Below 50th centile

Des ta two and t
dimensi s s of student's aptitude for
appreciati a and readiness for learn-
ing in l

t-tes w t thod for calculating the data on this test. s thod permitted a comparison of the differences in e students' scores on the pre-test and retest after having home economics.

The artistic ability according to the findings of the pre-test and retest on the Graves' Design Judgment Test indicated that artistic aptitude was significant at .05 and .01 levels with the retest score being significantly higher (Table XXII). This finding indicated that art ability could be improved after training.

According to the results of the statistical analysis of the pre-test and retest scores on the Graves' Design Judgment Test, the ability of students to judge and appreciate art improved after a semester of homemaking. This improvement after study showed that students had more ability in judging through knowledge of design principles.

Figure 3 further presents a picture which substantiates the statistical findings of the t-test. The shaded area of the pre-test polygon shows that students had more low scores

TABLE XXII

COMPARISON OF STUDENTS' RAW SCORES ON PRE-TEST

RETEST ON GRAVES DESIGN JUDGMENT TEST

Factor	a	t-test S	r		e
Design Judgment Test	Pre-test and retest	-5.256		98	.0 .01

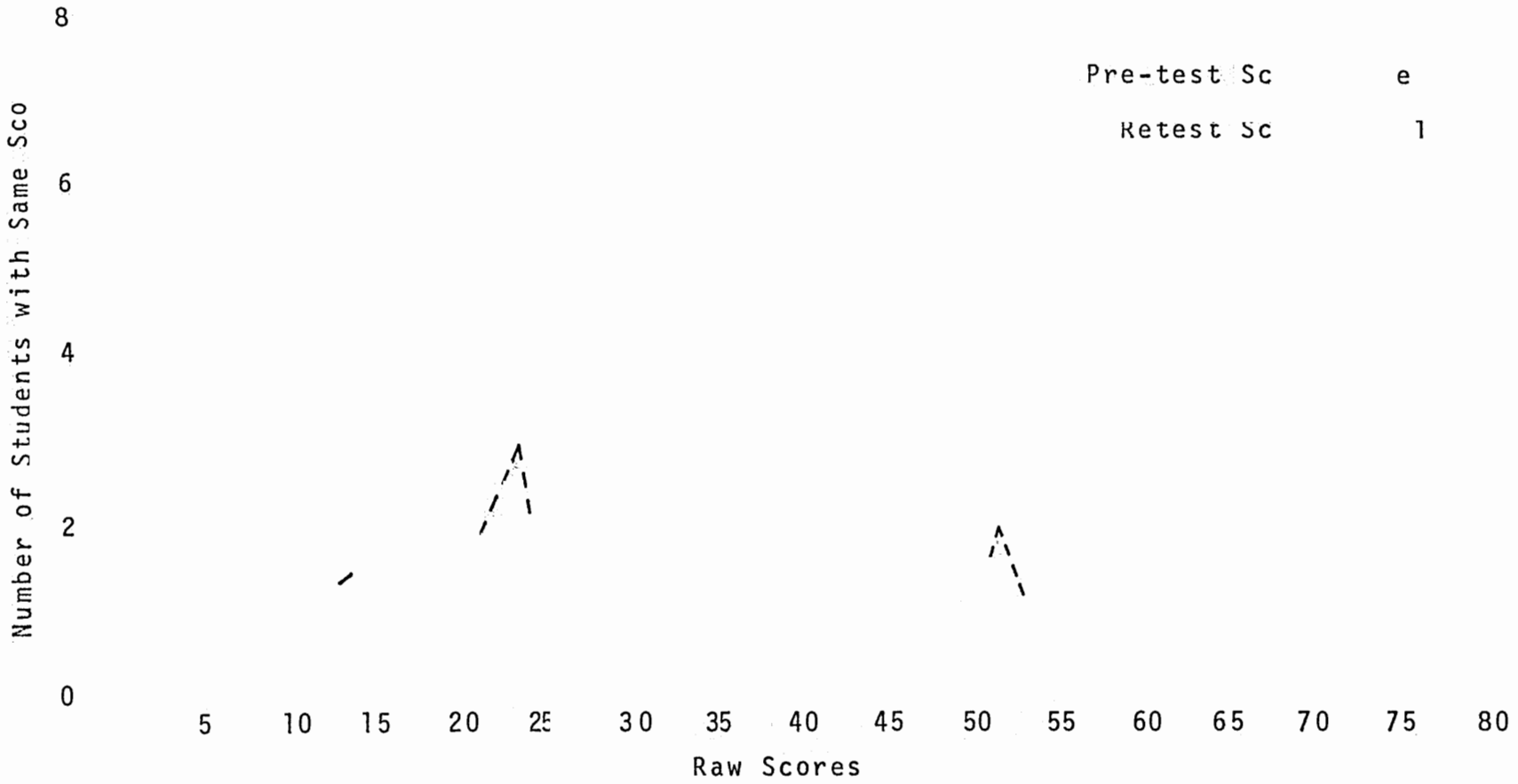

Figure 3

Polygons Comparing Pre-test and Retest of Graves' Design Judgment Test for 50 Homemaking Students

on a a very sm number of high ore ork in home economics. The heavy l polygon shows that there was an g a decrease of low scores after a ' nomics.

The resu of ana ses indicated that this sample of students' intere was no changed. The findings revealed that home economics training apparently affected the student's art aptitude in a positive direction.

CASE STUDIES

Two outstanding individual cases were noticed in this study. Case I showed a change from an artistic interest to clerical interest on the Kuder Preference Record Test. This change was probably due to being a typing winner. The artistic scores were high on the pre-test and retest on the Graves' Design Judgment Test. If the Kuder Preference Record Test had been given as a retest, the artistic interest probably would have returned to a high score after the student placed fourth in a nation wide table setting contest.

Case II had a score below the fiftieth percentile on the Graves" Design Judgment Test pre-test, but the artistic ability of the student increased to a high score above the fiftieth percentile. This student found that artistic

ability e rs which involved design principles. A r of fabric flower arrangements were made by this student before the retest was given.

The overall picture revealed that a high natural ability is important for success in artistic endeavors. The tests on the Flanagan Aptitude Classification Tests which indicated a pronounced influence on artistic aptitude were first, vocabulary and coordination, and second, ingenuity and memory.

IV

C

The rpose t s dy was to determine relationships between interest an natural aptitudes in various capacities of art as related to homemaking in high school nome economics programs. Data were obtained from 50 students enrolled in Homemaking II and III in Nocona High School, Nocona, Texas, Saint Jo High School, Saint Jo, Texas, and Prairie Valley High School, Route 3, Nocona, Texas during the academic year of 1967-1968. The students' interest, natural aptitude and art aptitude were measured on standardized test forms of Kuder Preference Record, Form CH (18), Flanagan Aptitude Classification Tests (9), and Graves' Design Judgment Test (11).

Data from the Kuder Preference Record, Form CH (18) test were used as a basis for determining students' interest preferences with related art areas. A test and a retest was used to determine if a change in students' interest was made after a year's work in homemaking. An analysis of the differences between the test and retest was made. This comparison revealed that interest was not changed after a year's work o economics.

a Tests (9)
s ng the natural artistic
abil den ed to art in home economics.
The le sc were collected from the files of
the counselo The 12 highest and the 12 lowest scores were ranked and compared. Scores for the Flanagan Aptitude Classification Tests were also ranked with percentile scores of the Graves' Design Judgment Test.

The findings indicated that high natural ability was needed to succeed in artistic ability; however, artistic ability of students with low natural ability indicated a noticeable, non-significant increase. Results showed that four natural aptitude tests, vocabulary, coordination, ingenuity and memory, on the Flanagan Aptitude Classification Tests showed a pronouced influence upon artistic ability.

Data from the Graves' Design Judgment Test (11) were used to determine the artistic differences of the students after a year's work in home economics. The differences were treated to a t-test for significance. Statistical results indicated that this sample of students improved in artistic aptitude after a semester in home economics.

This study had a small number of girls in the sample; therefore; results give only an indication of the actual relationship between art and areas related to home economics.

The t gn princip
u of a b ves' Design Judgment
would probably a cture of how art relates
to home economics.

In view of findings in this study, the author makes the following recommendations:

1) Further study needs to be made in the field of art as it relates to home economics including a larger sample.

2) Art principles should be integrated into all phases of home economics.

3) The teachers of home economics should provide the climate for development of art in home economics.

4) An art awareness and judgment should be developed in home economics class study.

5) Home economics majors should have a special, technical required art course directed toward creativity in all areas of homemaking.

6) Studies are recommended in various phases of home economics, clothing, child care, foods, home care of the sick, family living, consumer education and housing, as they relate to art.

7) Art creativity should be developed in the curriculum of home economics.

The author concluded from results of all statistical analyses that for this sample of students, interest apparently was not changed after a year's work in home economics. Results of this study revealed that high natural ability was

nee r Four tura a il

ties-- u enuity, and memory--

indicated a relationshi c ability. Art abilities

of the students, howeve influenced by a year's study

in home economics ind t art is related to home

economics.

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