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A Pilot Program in World Geography Using Modern Educational Methods and Techniques

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A PILOT PROGRAM IN WORLD GEOGRAPHY USING MODERN EDUCATIONAL METHODS AND TECHNIQUES

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TABLE OF CONTENTS

CHAPTER I

I. INTRODUCTION

One current emphasis in educational research is on social studies. The objectives and needs of the past are being re-examined, and in many cases re-written to fit the needs of modern society. Along with this, a close look at instructional methods and their relationship to achievement is under close study.

Prior to 1962, social studies was presented mainly through the use of a single text, and one method, the lecture. Teachers utilized this method to the fullest extent and memorization of facts and dates was the basic output.

In 1962 Project Social Studies began with twelve centers established for writing curriculum programs for inclusion in public school curricula. (15). Federal and state money, along with private grants, was used to gather information from all phases of social studies. These programs were designed for student involvement through the use of a variety of instructional methods and materials. Over sixty projects are now being field tested and in the near future results should be known.

Statement of the Problem

It was the purpose of this study to compare the difference in achievement of students in a multi-instructional method approach to the achievement of a similar group of students in a traditional classroom instructional approach.

Importance of Study

The major focal point of education must be on students and their needs. The days of the traditional classroom are rapidly coming to an end and innovations are being accepted in all facets of our profession. This leaves the teacher in a delicate position. He, too, must recognize the needed change and become more knowledgeable in the use and evaluation of a variety of instructional methods. He must also recognize different needs of the students' and include them in all phases of curriculum planning. The change to this new process may be long and painful to some educators, but society demands this of professionals. Experts provide the needed materials and the classroom provides the scene. It is then up to the classroom teacher to provide the direction and evaluation of different instructional methods designed to meet student needs.

Analysis of the Problem

The decision on what methods to use and when to use them is a major one. No one approach to teaching, no single arrangement to promote learning is substantiated as superior

by empirical tests. (11:29). This study will seek to determine if multi-instructional methods will make any noticeable differences in achievement of two matched groups.

Limitations of the Study

It is easily seen that the student involved in the afternoon, fifth and sixth periods, would not be as alert as those in the morning. The grouping took this into account as much as possible by including fifth period in the control group and sixth period in the experimental group.

The investigator acknowledges the presence of the Hawthorne effect on such a study. Further, the investigator acknowledges the tentativeness of the data due to the long break between the units and the testing of the units.

Finally, the investigator recognizes the size of the classes in which group members were which could have an effect on the data results through test scores.

II. THE HYPOTHESIS

Statement of Hypothesis

There will be a significant difference in achievement of the experimental group over the control group when the experimental group is taught the same materials as the control group with a variety of multi-instructional methods for the same length of time. Furthermore, the achievement will be

measured with identical achievement tests administered within a one-day span.

III. DEFINITION OF TERMS

1. Control group - Throughout the report the term "control group" shall be interpreted as a group of forty-nine students selected by I.Q. and socio-economic status from three ninth grade World Geography classes. They were taught in the "traditional" way with lectures as the only method and the blackboard as the only aid.

2. Experimental group - The term "experimental group" shall be interpreted as a group of forty-nine students selected by I.Q. and socio-economic status from three ninth grade World Geography classes. They were taught using a variety of methods and a variety of visual aids and materials, including:

A. Inquiry - This method was used at the beginning of each unit to create an interest or lesson set for motivation. A visual aid in the form of a map was used to stimulate thinking of students.

B. Group dynamics sessions - These were used to encourage creative thinking by students on a variety of subjects. The teacher was a member of the group and subject to the rules the same as the other members.

C. Low level discussion - This is direct feedback on

set material covered by the students. The answers to the teacher's questions are short and concise.

D. High level discussion - This requires more original thinking and comes from redirected student questions or some form of inquiry approach.

F. Simulation games - This method is used to apply previously learned materials in a simulated situation. The use of reinforcement and true life oriented concepts are highly important to insure success.

3. Concept - This is an idea or mental image of what a thing in general should be, especially a representation of the common elements or attributes distinguishing one group of objects or ideas from other groups.

4. Methods - These are the procedures in which the objectives of the course or unit are pursued. This term will be used interchangeably with strategies.

5. Behavioral objectives - These basic aims of the instructional study can be measured or evaluated through student achievement. These goals are selected and clearly stated so the student knows the level of performance that is expected of him.

6. "New" Social Studies - This term is used to describe the cumulation of new materials and methods in social studies. The multi-disciplinary approach with student involvement as the key are two such parts found in new social study projects.

CHAPTER II

REVIEW OF THE LITERATURE

Basic topics regarding social studies curriculum development will be reviewed in this chapter. These topics are: (1) the expectations of the experts toward the teaching of social studies; (2) the shortcomings of traditional social studies; (3) projects that are striving to improve social studies teaching; and (4) methodology changes to promote the teaching of social studies.

I. GOALS IN SOCIAL STUDIES

All curriculum must have direction and well-defined goals leading to a final basic objective. (5:3). Hilda Taba feels that specific content, types of learning conditions, and the way to evaluate the learning are of utmost importance. (27:8). Fannie Shafel stresses reality as the basic goal of social studies, and emphasizes the need for content and learning to revolve around reality. (25:9).

Samuel Brodbelt thinks that skill building through problem solving should be utmost in the social studies curriculum. (4:243). Critical thinking can be built through problem solving and the forming of generalizations within the framework of social studies, states John Higgins. (14:56).

Harold Kastner best sums up the goals of social studies with three interrelated objectives which are specific for social studies. These are:

1) The development of a familiarization and understanding of the general content of the social studies.

2) The development of an appreciation of the society's social values and the obligation the individual has to the society.

3) The development of skills which enable the individual to collect and critically evaluate information concerning the social studies. (18:203).

II. SHORTCOMINGS OF TRADITIONAL SOCIAL STUDIES

Relevancy in the teaching of social studies is sometimes difficult. Our society is constantly changing and the schools are not keeping up with this change. The social studies curriculum has not become oriented toward the future lives of the students it serves.

One of the reasons for lack of relevancy as Joe Park sees it is the lack of a challenging curriculum. (29:6). Students are not challenged to think critically and constructively, to develop sound attitudes, and to discipline themselves in solving the problems of society. (29:6).

George Tauscheck blames traditional social studies for too much reliance on a set textbook. (28:152). Frank

Brown agrees and stresses the failure of the textbook to meet individual needs. (5:3).

Tradition and memorization are the two basic problems felt by M. P. Hunt and L. E. Metcalf. (16:8). In concurrence with Hunt and Metcalf, John S. Gibson supports the need for students to develop critical thinking ability to discern public issues, and to participate more in public affairs is of vast importance. (11:11). Hamm further states that issues such as social strife, provery, and population expansion are either ignored or glibly mentioned in the traditional approach. (13:7).

Dorothy Fraser, past president of the National Council for the Social Studies, suggests revision for social studies because of these reasons:

1) Many programs are overpacked with factual data and teachers feel they must "cover" all the material.

2) For safety of the teacher's position, the curriculum can be adjusted to cover only issues which do not cause dissent by anyone.

3) Current issues must be dealth with--not past societies.

4) Problem solving must be stressed more than before to develop skills in critical thinking and participation in civic affairs. (10:104-196).

III. PROJECT SOCIAL STUDIES

Project Social Studies was created in 1963 to examine the existing social studies program and field test various experimental programs to be incorporated into public school systems. (15). Twelve centers were established for writing curriculum programs for inclusion in public school curricula. (15). About half of these projects are completed and are being commercially published and distributed for school use. Funding for these centers has come from federal government investment of nearly five million dollars and grants from colleges and private firms. (23).

Curriculum writers involved in these programs gathered information from all phases of the social studies. They became cognizant of the criticisms and problems that existed and made as their main aim development of programs and materials on relevant topics. (20). Furthermore, they stressed student involvement as the foundation of their program. (20).

Approximately sixty programs have been, or are being, developed in the social studies realm. Some are narrow in scope, while others cover several disciplines. All are highly skilled in providing skills needed for the student of today's society. (23).

IV. METHODOLOGY IN SOCIAL STUDIES

Along with the various discipline approaches a myriad

of teaching procedures have been designed. Strategies developed by most projects stress student participation rather than teacher direction, (21:8). Role playing, gaming, simulation, problem solving, and pupil deployment are the most visible strategies of current social studies projects. By using one or a combination of these activities, students are placed in a position as participators rather than observers.

Many of the experts advocate that learning through these methods provides germane experiences for students. Marilyn Clayton and Richard Rosenbloom in Simulation---Games in Learning stress games as a means to an end as one of the many methods teachers may use. (3:85).

Games are a natural medium to employ in the design of new curricula for the schools. Their characteristics are compatible in a number of important respects with the main spirit which infuses contemporary curriculum revision, and games offer the potential for a new and more effective kind of learning experience. (12:63). But games are not a universal medium for instruction, no more so than the books and lectures whose shortcomings they might help us to offset.

Sarane Boocock stresses the need to design games that utilize life situations. (3:10). Harold Guatghow further supports by accenting model simulation on current problems that face the world today. (12:18). Both emphasize gaming as an educational means with goals set up beyond the enter-

tainment realm.

Experts employ role-playing concepts within simulation to enhance the application of learning. (1:16). Fannie Shafel combines with gaming by stating:

"Games of strategy offer a good model of rational behavior of people in situations where they have a variety of choices." (25:10).

The use of inquiry in the classroom is not new, but is becoming more highly developed in today's educational process. The Teacher's Handbook for Inquiry Training states that prior to the beginning of formal education the child learns almost exclusively through inquiry. (27:17). Furthermore, inquiry training subject matter is used as a vehicle for teaching inquiry; inquiry is not a vehicle for the teaching of subject matter. (27:17).

The use of problem solving in the classroom is needed at the junior high level. As Veronica Casey and Raymond Muessig see it, "At this age level, students are becoming more capable of recognizing problems which confront them personally or as a member of society,"... with teacher direction analyzing, summarizing, and conclusions of problems can be formed. (6:49).

Paul L. Dressel and Lewis B. Mayhew stress that problem solving leads to a critical thinking process (7:6). The selection of a central theme and clarity of the theme's rela-

tionship to the problem should be the most important phase considered.

Group interaction is becoming very important in dealing with some of the basic social studies problems. The size and direction of the group depends on the teacher and the goals of the class. Harrison Elliott sees group interaction as "the way to true democracy through the active participation of every individual up to the limit of his capacity in the conduct of all his social, vocational, and political affairs." (8:20).

Methods should be used to fit the needs of a particular teacher at a particular time. (11:18). There is no evidence that has been examined by this investigator supporting one method as the ultimate means in education. Hence the more varied the methods, the more varied the experience and hopefully the greater the chance for learning.

CHAPTER III

I. RESEARCH SETTING

Ninth grade students at Highlands Junior High School in Kennewick, Washington, were the subjects for this study. Highlands Junior High serves a community of largely middle and upper-middle class families, many of whom are doctors, scientists, attorneys, and business executives. The smallest of the district's two junior high schools, Highlands has approximately 800 students in grades 7 through 9.

The experiment included 98 Highlands ninth grade students on which reliable data could be gathered. The experimental treatment was conducted during the students' regular classes in "Washington State History and World Geography," the ninth grade social studies class required of students. Classes were held the first six periods of a seven-period day.

One teacher, a male age twenty-nine, conducted the experiment. The instructor had a bachelor's degree with a sixty-hour block major in Social Science. Further qualifications consist of six years experience at the ninth grade level, all in the social studies.

Two units were selected from the seven designed for the year's study. The time element for each was selected to

get utmost interest and output from the students. Unit One on the local area was presented from September 22, 1969, to October 24, 1969. (See Appendix B). Unit Two on the development of cities was presented April 6, 1970, to April 24, 1970. (See Appendix B).

II. PROCEDURES FOR THE EXPERIMENT

The procedures used in this experiment will be discussed in terms of three factors: (1) the design of the experiment; (2) the teaching procedures; and (3) the testing procedures.

Design of the Experiment

Basically, the experiment followed the classical design for experimental research. Sampling was done through division of the six classes, three were placed in the control group and three in the experimental group. All teaching in the experiment was done by one instructor. Identification was established through labeling the groups E for experimental group and C for the control group. These groups were designed so two control groups and two experimental groups were in morning classes, and one control group and one experimental group were in the afternoon.

Matched pairs were drawn from the experimental and the control groups on the basis of socio-economic status and intelligence scores taken from the school records. (See Appen-

dix C). The intelligence scores were based on the Stanford-Binet Intelligence Test which is the intelligence test used at Highlands Junior High. The pairs used in the study were matched the first day of school and remained constant throughout the year. There were no dropouts or transfers during the school year.

Teaching Procedures

Two conditions occurred in this experiment. One condition incorporated and encouraged student participation through the use of a variety of methods and materials. The other condition limited student involvement and was highly structured. Condition two will be referred to as the "traditional method".

Prior to the beginning of the experiment one identical unit was taught by the instructor to both groups. This was done to set basic skills needed to make the experiment consistant. Each student was taught how to outline from a lecture and textbook material. Furthermore, they were taught the verbal and visual cues to look for when determining what to write down from either a lecture or textbook material.

This period of time, two weeks at the beginning of the year, also gave the instructor time to get to know his students. This was especially important for the interaction with the experimental group.

A pre-test was administered at the beginning of each unit. The test was developed in conjunction with the behavioral objectives and administered directly after the objectives were established. The questions were constructed so they could be measured in performance terms.

A close examination of each unit and its traditional counterpart is necessary for a full understanding of the program. In Unit One (See Appendix A) the experimental group worked with the instructor in setting up the unit structure. Interaction and group concensus on performance objectives and material to be studied were two of the main aims. The control group was told what they were going to do and the performance objectives were handed out to them as a study guide.

The instruction phase continued the pattern for the experiment. Methods were constantly varied for the experimental group with inquiry, group work, and a simulation game highlighting their work. The control group never varied from the lecture pattern and written work from the lectures. The same factual material was covered in both the control group and the experimental group.

During the period of time between the presentation of Unit One and Unit Two, both groups operated under the same program. A variety of methods were employed and student involvement was the key.

Unit Two (See Appendix A) was presented directly upon

returning to school after spring vacation. As in Unit One, the experimental group was allowed to interact and help select the behavioral objectives while the control group was again told their course of study and given the objectives in the form of a handout. A variety of methods were presented to the experimental group including inquiry, problem-solving, group dynamics and a simulation game. The control group was lectured to and had a quiz over the lecture every other day. Both groups were given a copy of the Senior Scholastic magazine for November 22, 1968. They were instructed to read the article "Our Cities in Crisis" on pages 5 through 25. The experimental group was to read the article and then the major points brought out in a discussion. The control group was to read the article. No discussion ensued with the control group. The same pattern was followed with a list of vocabulary words.

Testing Procedures

A pre-test was administered to each group directly after the behavioral objectives were completed. (See Appendix B). These test questions were designed to measure the entry level of knowledge of each group.

An achievement test was constructed for each unit involved in the study. (See Appendix B). The tests were designed to meet the performance objectives stated at the

beginning of each unit. Furthermore, the post-achievement test stressed areas of poor performance on the pre-test in both units.

A variety of types of questions was constructed to insure clarity of interpretation by the students. The program test for the Senior Scholastic article, "Our Cities in Crisis", was also used to aid in the validity of the experiment.

The tests were administered immediately upon completion of each of the units of study. Unit One test consisted of one hundred possible points and Unit Two test was seventy-five possible points. Each test lasted for a maximum of fifty-two minutes.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The results of testing were organized by a statistical comparison of the difference in achievement of the control group and experimental group as shown by a "t" test of significance of the matched pairs.

I. PRESENTATION OF EVIDENCE

The results of the "t" post-test of achievement are explained in the following comparison. (See Appendix C).

GROUPS	N	MEAN DIFFERENCE	STANDARD DEVIATION	t
Control	49			
Experimental	49	-3.86	9.5	2.876

The achievement test constructed for the test groups in this experiment were administered to the experimental and control groups. The raw scores were computed so that a statistical comparison was made between the scores of the experimental group and the control group. The aim is at a five percent level of statistical significance.

A "t" test of significance was computed for each test group of matched pairs. This comparison showed whether

there was any difference in the scores of the test groups. The formula used to compute the "t" test was:

$$t = \frac{\bar{x} \text{ diff.}}{\sqrt{\frac{s^2 \text{ diff.}}{N}}} \qquad t = 2.876$$

POST-TEST

Experimental		Control		D	D^2
G.S.	129	R.S.	131	+2	4
J.R.	121	L.B.	127	+6	36
C.J.	165	J.M.	152	-13	169
M.S.	117	S.R.	100	-17	289
J.H.	138	B.S.	140	+2	4
F.U.	132	S.W.	134	+2	4
J.R.	123	B.S.	118	-5	25
J.F.	120	S.T.	132	+12	144
P.H.	65	J.P.	61	-4	16
C.W.	138	D.G.	140	+2	4
J.C.	115	J.B.	111	-4	16
R.J.	138	S.F.	131	-7	49
M.L.	92	S.M.	86	-6	36
T.S.	90	H.B.	92	+2	4
M.P.	152	T.H.	135	-17	289
J.D.	124	R.B.	121	-3	9
S.J.	113	S.L.	122	+9	81
B.K.	90	L.B.	64	-26	676
J.P.	173	L.R.	158	-15	225
J.B.	141	L.S.	143	+2	4
P.D.	114	L.A.	110	-4	16
B.S.	96	S.W.	92	-4	16
G.C.	107	T.B.	109	+2	4
S.J.	122	K.M.	123	+1	1
J.B.	148	D.B.	152	+4	16
J.T.	128	L.W.	121	-7	49
H.J.	118	D.J.	102	-16	256
A.F.	100	T.B.	108	+8	64
T.J.	122	R.B.	130	+8	64
D.J.	142	T.H.	130	-12	144
D.D.	99	R.C.	90	-9	81
J.K.	104	B.B.	120	+16	256
M.V.	103	M.Mc.	98	-5	25
N.T.	162	T.M.	150	-12	144
L.S.	98	R.B.	104	+6	36

Experimental		Control		D	D^2
G.B.	130	C.T.	121	-9	81
T.C.	64	D.Z.	68	+4	16
A.B.	112	C.R.	118	+6	36
C.K.	130	R.B.	118	-12	144
B.T.	116	S.W.	110	-6	36
T.E.	143	M.T.	144	+1	1
L.C.	122	R.C.	118	-4	16
R.B.	120	L.S.	112	-8	64
J.B.	158	R.R.	128	-30	900
L.C.	126	L.L.	120	-6	36
T.R.	139	M.O.	130	-9	81
G.G.	86	J.G.	100	+4	16
T.B.	108	G.T.	104	-4	16
M.N.	122	L.T.	108	-14	196
TOTAL	5915		5736	-189	4965

The five percent level was established as the statistical measure of significant learning. Further evidence for a valid statistical measure can be seen in the pre-test. The results of the pre-test can be seen in the following comparison. (See Appendix C).

GROUPS	N	MEAN DIFFERENCE	STANDARD DEVIATION	t
Control	49	.082	.51	.161
Experimental	49			

The formula used for the pre-test was the same as in the post-test with forty equal test items given each group.

PRE-TEST

Experimental		Control		D	D^2
G.B.	18	R.S.	22	+4	16
J.R.	26	L.B.	21	-5	25
C.J.	24	J.M.	20	-4	16

Experimental		Control		D	D^2
M.S.	24	S.R.	26	+2	4
J.H.	34	B.S.	32	-2	4
F.U.	28	S.W.	31	+3	9
J.R.	24	B.S.	25	+1	1
P.H.	10	J.P.	12	+2	4
J.C.	27	J.B.	25	-2	4
R.J.	29	S.F.	32	+3	9
M.L.	21	S.M.	20	-1	1
T.S.	29	H.B.	21	-8	64
M.P.	32	T.H.	26	-6	36
J.D.	28	R.B.	29	+3	9
S.J.	23	S.L.	27	+4	16
B.K.	18	L.B.	12	-6	36
J.P.	35	L.R.	33	-2	4
P.D.	26	L.A.	24	-2	4
B.S.	18	S.W.	20	+2	4
G.C.	22	T.B.	21	-1	1
S.J.	20	K.M.	24	+4	16
J.B.	35	D.B.	39	+4	16
J.T.	26	L.W.	28	+2	4
H.J.	22	D.J.	19	-3	9
A.F.	23	T.B.	25	+2	4
T.J.	21	R.B.	20	-1	1
D.J.	27	T.H.	23	-4	16
D.D.	20	R.C.	21	+1	1
J.K.	21	B.B.	28	+7	49
M.V.	23	M.Mc.	21	-2	4
N.T.	32	T.M.	29	+3	9
L.S.	18	R.B.	26	+8	64
G.B.	30	C.T.	27	-3	9
T.C.	10	D.Z.	9	-1	1
A.B.	19	C.R.	21	+2	4
C.K.	26	R.B.	24	-2	4
B.T.	22	S.W.	25	+3	9
T.E.	31	M.T.	30	-1	1
L.C.	29	R.C.	26	-3	9
R.B.	24	L.S.	28	+4	16
J.B.	31	R.R.	27	-4	16
L.C.	26	L.L.	28	+2	4
T.R.	29	M.O.	27	-2	4
G.G.	18	J.G.	21	+3	9
T.B.	24	G.T.	29	+5	25
M.N.	29	L.T.	27	-2	4
TOTAL	1221		1217	+4 or 150	610

In summary, a positive study was conducted under set conditions and the results would be the same if all conditions were the same ninty-five times out of one hundred.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

The study was designed to find out whether multi-instructional methods had more effect on ninth grade students at Highlands Junior High in achievement than a traditional instructional method. Students were grouped by matched pairs and pre-tested to measure level of achievement prior to the study. The units were taught using identical factual materials, but a difference in instructional methods. Then a post-test was administered to each group.

Results were comparable for both groups on the pre-test, but there was a measurable higher scoring on the post-test by the multi-instructional method group.

II. CONCLUSIONS

The hypothesis that an experimental group would achieve higher than a control group on a set test was positive. (Table 1, Chapter 4). This was achieved at a level greater than the five percent level to help enhance the validity of the experiment. Furthermore, a set pre-test was administered before the actual teaching of the units and the results showed both

groups to be close to parallel in achievement previous to the experiment.

A close look at the "t" test on the matched-pair group would show the following specific information.

The difference in achievement on the post-test was in favor of the experimental group by 2.876 which is valid at beyond the five percent level. The positive hypothesis is retained by this writer in all statistical comparisons. The difference in achievement on the pre-test was .161 in favor of the control group. (Table 2, Chapter 4). This illustrates that both groups were close to equal prior to the experiment.

Generalizations arising from this analysis must be tentative, both because only the subject field of social studies was examined, and also because of the complex nature of learning in its immediate and long-range aspects.

Learning in the classroom, or elsewhere, incorporates a number of complex identities such as perception and discrimination, association, aptitude, set, and motivation. These forces interact to form an individual's thinking or generalizations, which in turn cluster as concepts.

How strongly these elements basic to learning are influenced by various methods has yet to be determined. Teachers must continue to research the problem. Method and theory must be combined to promote good teaching in the future.

III. RECOMMENDATIONS

During the course of planning and conducting a study, many insights and innumerable avenues for exploration arise which are inconveniently invisible at the initiation of the experiment. A thesis is as much an act of learning as it is an act of proving or disproving.

Recommendation one is that research and constant evaluation in all fields of education must be continued. Special studies should be made in the area of instructional methods and their effect on learning. One study is not sufficient to truly measure the effectiveness of the various strategies.

A second recommendation is that future researchers isolate each instructional method and test individually to see the effect that particular method has on achievement. This may aid in answering some of the "whys" seen in the positive "t" score of this study. It could also help measure the amount of Hawthorne effect on the study.

A third recommendation is that careful analysis should be made of all student responses aligned to achievement, such as the effect of different instructional systems on the ability of students to think critically, to work independently, and on their concepts of learning and of self. Queries should be aimed at the results of these systems and not the methods themselves. This could help to transfer some

of the students' work to the affective domain.

Fourth, and last, this investigator recommends a longer length of time be allowed for a study of this type. In this program the time element was structured to fit a rigid schedule of methods and materials presentations. Perhaps in attempting to eliminate intervening variables some of the vitality that the writer was trying to measure was lost.

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APPENDIX

A

STUDY OF THE LOCAL COMMUNITY

OVERVIEW

I.	Setting up objectives	2 days
II.	Designing group problems	1 day
III.	Historical Background	2 days
IV.	Examining the local area	3 days
V.	Group Reports and resource people visitations	10 days
VI.	Map puzzle	2 days
VII.	Simulation game	5 days
		25 days TOTAL

Methods Used:

1. inquiry
2. small group
3. problem solving
4. concept approach
5. lecture
6. resources from community
7. individualized learning
8. discussions
9. simulation games

Teacher initiated methods in this unit:

1. lecture
2. discussion
3. resource people
4. concept approach
5. inquiry
6. small group
7. simulation games

Student initiated methods:

1. problem solving
2. individualized learning
3. discussion
4. inquiry
5. small group

Behavioral Objectives:

1. To identify by listing the five major population areas in Benton County.

2. To list and place on a map the three rivers in Benton County.

3. To be able to recite the correct form set up in class for contacting resource persons for their groups.

4. To construct a thank-you letter using the form on the board.

5. To select the three main years of growth from a list of ten possible years.

6. To list three reasons for the growth from lecture notes.

7. To compare the cities in the Tri-Cities as to (1) date created, (2) growth pattern 1900-1970, (3) and the way in which they got their name in a written essay from lecture notes.

8. To be able to solve ten problems, to the nearest dollar on taxation using the millage formula presented in class.

9. To identify five of the major problems in the Tri-Cities from group reports for later comparison by the entire class.

10. To construct note cards for oral reports using the outline form given the first week of school.

11. To compare licensing and bonding for businesses and give a definition of each from the group report.

12. To identify five major business categories from the ten presented by the group.

13. To list the four major social problems in the Tri-Cities from the lecture.

14. To recite the basic street pattern in Kennewick from a map of the local area.

15. To recite the basic avenue pattern in Kennewick from a local map.

16. To identify the way to annex into Kennewick from the Kennewick City Ordinance and notes taken from group reports.

17. To identify the correct way to change zones within Kennewick from a list of four possible ways, using knowledge obtained from notes on the local area.

This unit was created out of frustration caused by inadequate subject matter in Washington State History. The need to know more about the area that we live in and being able to relate it to other phases of social studies was the main aim. The methods were varied to involve the utmost of student participation possible.

I. Setting up the objectives

A. Student involvement is the key

1. Ask students to list what they would like to know about the area in which they live.
2. Wrote ideas from the students on the board.
3. Discussed where the material could be found and what resource people could be used (titles of)
4. Redesigned ideas into questions that could provide a topic list.

B. Setting up performance objectives

1. Handed out to students (second day) list of objectives, written in behavioral form, from list on the board.
2. Examined and modified to fit needs of the class.
3. Selected groups of student choice and designed a calendar for projects to be completed.

4. Established time and ten-day calendar for resource people to speak. Visitations after school and evenings require one week notice.
5. Design-with-class format for using telephone to call resource people.
6. Design-with-class procedures for letters to resource people.

II. Group problems

A. Each group will have the following:

1. Chairman
2. Secretary
3. Recorder for resource people
4. Tape recorder specialist
5. Objectives reviewer

B. Once a week the group will:

1. Examine data received and see if they are following their objectives.
2. Check the calendar for conflicting dates with other groups.
3. Check to see if they have sent questionnaires on topic to resource people contacted.

*Group problem is back of unit.

III. Historical Background

A. Inquiry approach to county - Benton County

1. Outline map of county.

2. Ask students to fill in the map - each have a copy like your transparency.
3. Pose questions by asking why--example, why have a county? Why is the population located where it is?
4. List main ideas or questions posed next to the map on the overhead projector.
5. Use symbols to designate population size and place in all major rivers.

B. Lecture to class on historical development of the local area.

1. Benton County
   a. Lewis & Clark, 1805--first white men in this area.
   b. Indians traveled throughout
      1) Prosser main fishing area for the salmon-falls
      2) Richland was the area for camping before city.
      3) White Bluffs main camping ground and later became first store.
      4) Where Kennewick is today--area of tall grass and used by the Indians as a "winter paradise" for camping and feeding their horses.

c. The first settlers here were mainly interested in trading with the Indians and farming on a small level so settled along the Columbia.

d. The first white settlement in the Tri-Cities began in 1892 with the first irrigation system beginning then.

1) Northern Pacific Irrigation Company
2) Didn't do much until the early 1900's
3) Then in 1903 the Northern Pacific Railroad arrived in the Northwest; originated one-half mile from today's Kennewick.

e. 1905 Benton County was created.

1) Named after Thomas H. Benton who aided in passing legislation for the west--U.S. Senator from Missouri.
2) At this time 5,000 people
3) Area 1,671 square miles
4) Ranks 24th in size in the State of Washington
5) Location: southern central part of Washington, surrounded on three sides by Columbia
6) Land forms: northern hilly and southern plateau

7) Desert land with good soil; climate? class.

8) Counties surrounding

9) Why would people settle here

a) Farming main aim

b) Importance of irrigation system and Northern Pacific Railroad

2. Tri-Cities

a. Pasco was first to be a stable city

1) Town called Ainsworth first began but with coming of Railroad merged with Pasco.

2) Merged with Pasco when finding need to become county seat.

b. Kennewick was second established--called Kennewock (board) by the Indians which means "area of tall grass"; Kennewick made stable with irrigation system.

c. Richland first began as an Indian trading site at White Bluffs; in 1943 the Hanford works began--population gained too rapidly for housing.

C. Chart on population growth

DATE	PASCO	KENNEWICK	RICHLAND
1900	254	---	---

1910	2083	1219	---
1920	3362	1684	279
1930	3496	1519	208
1940	3913	1918	247
1950	10288	10086	21793
1960	14522	14244	23543
1967	16500	15500	26500
1969	17000	16500	28900

IV. The local area today

A. Discussion on needs of an area, or people, to form a community.

1. Political structure
2. Protection
3. Food, water, shelter
4. Socializing
5. Jobs

B. Discuss how Tri-Cities satisfies these needs.

1. Local government
2. Columbia River
3. Hanford
4. Clubs, churches, schools, etc.

C. How does location effect the lives of the people?

1. Climate
2. Vegetation
3. Types of jobs

4. Style of clothes

5. Et Cetera

D. How would you improve or change the area?

1. Recreation improvements

2. Education

3. Sanitation

4. Local newspaper

5. Et Cetera

E. Structure and make up of one city--Kennewick.

1. Governmental structure--departments.

2. Taxation

a. Why taxes?

b. Where does the money go?

c. How do we figure taxes by mills--design for students to do.

3. Zoning - What is it and how does it work?

a. Examine various zones from a zoning map.

b. Compare the Tri-Cities from zoning maps.

4. Annexation--What is the procedure?

a. Look at and discuss the city's procedures

b. Examine a map showing city limits in each city

5. Examine and discuss various districts found

within a city--how does it effect you?

a. School

b. Fire

c. Police

d. Sanitation

e. Library

f. Hospital

V. Group reports and resource people

A. Group reports can tie in with resource people or be interdependent of them.

B. Last two days left open for evaluation of problems and summary to class.

C. Students may sign up, either in their groups or individually, to listen to any resource people.

D. All tapes of resource people must be marked and placed at listening stations within two days after resource people have spoken.

E. All thank-you letters must be sent out two days after the presentation.

F. All evaluation sheets on resource persons must be turned in the day after the presentation.

G. The library is reserved during all unstructured time for individual research on topics.

VI. Map puzzle

A. This is designed to involve students through study-

ing a map of the local area.

1. Discuss the pattern of streets and avenues in Kennewick.
2. Discuss the names of each--how do they correlate with persons, places, or things?
3. What streets, and/or avenues, are the most important? Why?
4. Compare the streets and avenues in Kennewick to those in Richland and Pasco

B. The puzzle

1. Using the clues provided, tell where in the Tri-Cities this is taking place.
2. They may do so individually or in groups.
3. Give bonus points to first one or group to find the answer.

VII. Simulation game on land speculation--the goal here is to place some of the learning experiences into practice with a close-to-life situation

A. Procedure for the game

1. Random grouping of students by their choice--three per group.
2. Give each group fifty thousand dollars of play money.
3. Place a large outline map of the Tri-Cities in front of the class

a. Map has been divided into small dots--over 200 in each town--and numbered from 1 - 200 plus.

b. Map has city limits drawn in with numbered lots overlapping into the county.

4. Set up zoning maps for the various cities next to game map.

5. Directions:

a. Each group will purchase lots from the game map in an open bidding procedure with highest bidder awarded the land. A group may purchase three adjoining lots at one time.

b. Each group will pay taxes according to existing millages designed for their city or county on the purchase price.

c. Each group will be responsible to answer the following questions in written form:

1) Zone land is in now

2) Purchase price and computed tax

3) Numbers of lots purchased

4) A running tally on lots purchased, taxes, and balance of money

D. Rewards for the game

1. Four year college is coming to Tri-Cities

a. It will settle where existing transportation, multiple dwellings, commercial area and available land permits it. It will consist of four lots at a value of fifty thousand dollars a lot.

b. Area around (within 2 lots) will go up in value 10% if commercially zoned.

2. A glass-making factory is going to be established to take advantage of sand found in the Tri-City area.

a. Keep in mind transportation, need for water and availability of land. It will consist of four lots of thirty thousand dollars each.

b. Area around will go up in value 10% if industrial. Lots directly touching industrial area.

3. New residential area is being developed in our area.

a. The need for transportation and availability of land are important. Each of the six lots will be worth ten thousand each.

b. Area around (lots touching) will go up 10% if commercial or residential.

4. One-half a day will be alloted to zoning change.

a. If you change your zone to commercial or industrial then you land value will increase 5%.

b. You must get a petition to zone change signed by ten people.

c. The class will vote on proposed change after you have presented reasons for change. Majority rules.

5. One half day will be alloted for annexation to the city of your choice.

a. A petition must be signed by ten people.

b. You cannot annex unless your land is touching the city limits.

c. You will present your reasons for annexing to the class. Then they will vote on letting you annex. Majority rules.

d. Upon annexing the value of your land will go up 5%.

E. Problems to be encountered.

1. A special school levy will be assessed on one of the cities and you will have to pay.

2. A railroad is going to be built and your land value will be adjusted depending on the zone.

3. A highway is going to be built and the result's

the same as two.

4. Money may be borrowed from the bank at a 10% per day compound interest.

F. Winner of the game is one with most money and/or most land value.

*A clerk and an auctioneer should be selected to help regulate the game. A tax consultant could be included.

A brief review of objectives of course to see if they have been followed could be done here. The post-test should follow directly after the review.

SOCIAL PROBLEMS IN THE TRI-CITIES

Juvenile Delinquents

1. What is the major juvenile delinquence problem in the Tri-City area?
2. How do the courts and local authorities handle this problem?
3. What percent of the total teenage population is involved?

Negro

1. Does Pasco have a ghetto?
2. Is the Tri-Cities capable of handling minority problems?
3. What groups are trying to overcome this problem?

Class Groups

1. Do we have a class breakdown in the Tri-Cities?
2. Give evidence of your findings--one way or another.

References

1. Tri-City Herald files
2. Mr. Moe
3. Fred English Home
4. Judge Lawless
5. Community Action Committee

RURAL VS. URBAN DEVELOPMENT

(a) Resident mainly

1. Restrictions as to building size, height, and cost.
2. How do zones effect the type of building and its use?
3. Interference and helpfulness of transportation.
4. Does population determine?
5. Speculation of property.
6. Racial development affecting zoning.

References

1. Zoning map of area.
2. City Attorney.
3. Vertical files.
4. Card file.
5. Encyclopedias.
6. Benton-Franklin Planning Committee.

People for resource

1. Mr. Gene Spaulding--Real estate.
2. Mr. Morton--Planner for Benton Franklin County.
3. City manager.

BUSINESS DEVELOPMENT POSSIBILITIES IN TRI-CITIES

1. Tax structure--in favor or against.
2. Zoning system.
3. Licenses and bonds on local levels.
4. Frontage. (a) Mall
5. Transportation and how does this effect development?
6. Shopping vs. service development.
7. Does population set type of business?

References

1. City Manager.
2. Junior Chamber of Commerce--Mr. Southwick.
3. Port of Kennewick--Mr. Newman.
4. City Attorney.
5. Vertical File.

TRENDS OF MIGRANT AND TRANSIENT WORKERS

FLUCTUATING IN OUR AREA

(a) Define between the two

1. Poverty program effect on these trends.
2. Types of employment this consists in and around
3. Must promotion mean moving?
   (a). Should this effect your choice of occupation?
4. How unions effect
   (a). Trades
5. Does this group effect the welfare roles in Benton County?

References

1. Unemployment Department.
2. Farm Labor Office.
3. War on Poverty--Gene Martinez.
4. Governor Evans--Poverty Program.
5. Local Unions.
6. Welfare Office.
7. State Department of Labor and Industry--Jim Dunlap.

ECONOMIC CONDITIONS OF AN AREA EFFECTED BY MAN'S USE OR MISUSE OF NATURAL RESOURCES

(a) Benton-Franklin County

1. Affect of population growth or development?
2. Affect of industrial development.
   (a). New industries coming in because of resources.
3. Affect of recreational development.
   (a). Dams.
   (b). Commercial recreational facilities.
4. Affect by political factors.
5. Affected by laws.
6. Affects of agriculture.

References

1. Benton County Planning Commission.
2. Junior Chamber of Commerce.
3. Vertical files.
4. Health Department.
5. Port of Kennewick.
6. Card file.

People for resource

1. Mr. Warren--agriculture agent.
2. Mr. McClellan--Soil Conservation Service, Kennewick.

DEVELOPMENT OF CITIES

OVERVIEW

I.	Mapping a new continent	2 days
II.	The importance of physical features	2 days
III.	Historical background	1 day
IV.	Problems of the cities	2 days
V.	Group dynamic session on problems	2 days
VI.	A major city today	2 days
VII.	A comparison of major cities	1 day
VIII.	Creative map of a future city	4 days
		17 days TOTAL

Text for student use:

"Our Cities in Crisis", Senior Scholastic, November 22, 1968. Pages 6-25.

Methods Used:

1. inquiry
2. high level discussion
3. low level discussion
4. group dynamics
5. lecture
6. resource from community
7. individual and group creativity

*high level discussion requires more original thinking and comes from some form of inquiry approach. Student asks questions and answers questions.

*low level discussion is coverage of material read and reviewed with basic concepts in mind. Teacher induces questions with definite answers in mind.

Teacher controlled methods in this unit:

1. discussions
2. lectures
3. resource person

Creativity aimed (both in thinking and in action):

1. inquiry
2. group dynamics
3. individual and group map construction

Behavioral Objectives:

Upon completion of this unit the student will be able:

1. To identify the fifteen major cities of the world and place on a map of the world where they are located.
2. To list three reasons why major cities are located on the coast or on major rivers.
3. To identify ten major problems of cities today.
4. To define a set list of vocabulary words with 100% accuracy.
5. To list five reasons for the location of cities where they are.
6. To list five things a city must have to survive.
7. To identify the major functions of towns, villages, and hamlets as they relate to cities.
8. To list in order the four things early cities were set up to do.
9. To select six results the Industrial Revolution had on cities and list them.
10. To identify the shift of population away from the city with the depression.
11. To list three reasons why crime is the highest in cities.
12. To compare and list three differences between Moscow and New York.
13. To list five basic zones found in a city.
14. To identify six basic areas found in a city from a map.

Lesson One

Method - Inquiry - a scientific approach to create a high interest by the student.

I. Large map of a make-believe continent - large in front of class, 8 x 11 for class.

A. Place 12 major cities where you think they would be located in the year 1962 - No. 1 through 12.

B. Keep in mind the following:

1. Continent surrounded by water and is equally located at all boundaries from other continents.

2. East and West coasts are better economically because of ocean currents from prevailing winds.

3. This continent is on the latitudinal lines of 52° north, 40° south.

C. Pause to put in cities--then state 10 reasons for their locating the cities where they did.

1. Example--on a river for transportation.

2. Specify that the reason can only be used once so they will have 10 different reasons.

D. Give students an overlay paper of thin transparent material.

1. Construct main transportation routes on your continent.

2. Do these routes correspond with the different means of transportation?
3. Use the following types of transportation:
   a. railroad
   b. highways
   c. canals
   d. airways

E. Make a scale of 1" = 50 miles and state probable cost of building this system of transportation using the following chart as a guide.
   1. Highways, $800 per mile
   2. Railroads, $500 per mile
   3. Canals, $300 per mile
   4. Airways, $100,000 per airport

F. Give out another map of the continent and have the students write the year 1812 on the top--turn large class map over where an identical large map can be found and write 1812 on the top.
   1. How, or would, this new date change your opinion on the location of the cities?
   2. Place all new cities on the new map numbering from 12 and place all cities that you would not change by the numbers you have on the maps of 1962.
   3. Give out another overlay--where do you think

the main means of transportation was during this time? (1812).

G. Correspond the maps and see if transportation routes in 1812 and 1962 are somewhat similar.

1. Write a paragraph comparing routes of 1812 and 1962.

2. Compare city locations for later discussion.

Reasons for Cities

(as the students listed for 1962 and 1812)

1. allurial fan - good farmland
2. major seaport
3. protected harbors
4. near natural resources
5. rivers and water power
6. transportation center
7. recreation
8. capitol
9. military installation
10. fishing
11. market for agriculture goods
12. industrial center
13. climate
14. existing physical features
15. historical background

16. river ports
17. hazardous spot in river transportation
18. fresh water
19. culture and religious center.

Class listed reasons why cities on a continent such as this one would be established where it is.

Lesson Two

Method - Discussion

II. The effect of physical features on the development of cities.

A. Using the large map, have students study the location of the cities as they placed them on their maps.

1. Note the significant physical features located nearby.

2. List the reasons and place on the board as you list.

3. See how many cities have the same reasons for their location.

4. Discuss how location and physical features could play an important part in population expansion.

B. What must a city have to survive?

1. Water, food, protection, and political structure--transportation will grow out of a need for these.

2. Again look to see if these cities could survive by having these factors.

3. Examine map of 1812 and ask the same questions.

C. Check map in the textbook to see if the same ideas can be seen in cities in Europe--discuss this idea.

D. Look at the area around a city--why do small communi-

ties seem to group there?

1. Natural market for goods they produce.
2. Areas with quick access into the city.
3. Transportation routes intersect.

E. How would you title these small communities?

1. Town
2. Village
3. Hamlet
4. Or for that matter how do you distinguish a city from a town
   a. Webster's Dictionary
   b. Encyclopedia. (define each).

F. Going to our map let's place some of each where we felt they should go--

1. Keep in mind location, distance and needs of the cities.
2. An understanding of the transportation routes also will help.

G. Is there a set pattern of small communities around a city?

1. If so, why? Does physical features, location and other such factors effect the location of small communities?
2. How strong, pertaining to small communities, is the presence of the big city felt?

3. Would you say that the big city is the hub of the surrounding communities? If so, why?

H. How does a small community grow into a big city?

1. Special industries provide jobs.
2. Needs vast transportation for people.
3. Could become a part through merging with other small communities.
4. These are mainly ways to get population centralized.

I. Hand out vocabulary words to be learned.

1. Urban
2. Rural
3. Metropolitan
4. Slums
5. Industrial Revolution
6. Population explosion
7. Depression
8. Taxation
9. Millage
10. Zoning
11. Annexation
12. City
13. Town
14. Village
15. Hamlet

16. Laissez-faire
17. Suburbs
18. Inner-city
19. Urban renewal program
20. Ghettos
21. Neighborhood
22. Congestion

III. Historical Background

A. First Cities set up to do:

1. Defense--walled city
2. Close to food source
3. People produced all own goods
4. Population was low

B. People who were leaders settled in the middle of the city with ranking of groups getting lower as moved away from the city.

C. Basic transportation was foot

D. Most cities had one ruler (serfdom type)

1. Political set up like a distatorship.
2. Especially in Europe and Asia

E. Closeness to rivers and other large bodies of water very important.

F. This continued until Roman Empire

1. Now beauty of city was stressed
2. Agriculture started to be less stressed.
3. Discipline was strong
4. Religion, culture and race played a big part in establishing the type of city here.

G. Impact of Industrial Revolution

1. Transportation change
2. Shift of the people off of the land into the cities.

3. More jobs for working class--hence, more trade unions.
4. More mechanization on farms so more people turned loose for work in factories.
5. Culture groups start own cities within the city.
6. Cities become total melting pots of the nation.

H. Impact of World Wars
1. City place of protection
2. Jobs with good wages plentiful
3. Women forced to work with men gone to war.
4. Transportation improved with need of Industrial output.
5. High discipline in the cities by government.

I. Impact of depression
1. industries stopped
2. trade and travel way slow
3. unemployment starts
4. inflation out of hands - banks close
5. men turn away from the city - back to the farm to provide basic needs.

J. Now Suburbs
1. City has new look with people forming rings around.
2. People moving away from problems of the city.

3. Made available by super highways and better cars.
4. Many small cities surrounding main city.
5. Seven out of ten in U.S. live in cities now.
6. Two-thirds of center area inhabitances are Negro with little or no education--no suburbs for the poor.

IV. Problems of the City - Most problems can be related back to the industrial revolution because even then man was not ready for large migration to the city. List problems as students see them on the board--then later compare them with the Senior Scholastic.

A. Transportation
   1. This was not an early problem, but now one out of three people own a car and no place to park them.
   2. Rush hour traffic and suburb travel make for problems
   3. Number one item in many budgets of cities
   4. Are we becoming a country run by machines?
   5. What London is doing about the problem?

B. Pollution - Air and Water
   1. Transportation and industries are the cause
   2. big health factor
   3. no let up in the past few years

4. Federal laws are coming out against pollution.
5. Making cars with special filters.
6. Harder and harder to keep drinking water from being contaminated.

C. Housing - population will double in 31 years according to experts.
   1. People moving to cities in vast numbers still
   2. Planned cities to take care of this.
   3. Cities under one roof - possibly for the future.

D. Preservation of parks and recreation sites
   1. High price for land in the area of city
   2. Rapid building of houses doesn't allow for this.
   3. More time for recreation as time goes by--smaller work week.

E. Crime - the rate of crime is highest in the cities.
   1. 16 to 25 age group is the highest
   2. Rate of crime increasing
   3. School drop-out and unemployment consists of a large percent of this group.

F. Welfare and unemployment is high
   1. Many unskilled workers
   2. Welfare easy to get
   3. Industries becoming more under automation
   4. Inflation is here
   5. retraining some workers

G. Race--current race problem and its effect on the cities
   1. Various minority groups found in the cities?
   2. Riots - are they a creation of big cities?
   3. Unemployment in minorities
   4. Lack of education
   5. Crime rate extremely high
   6. Solution?

H. Strikes and other social unrests among groups in cities.
   1. School strikes
   2. Garbage strikes
   3. Police strikes
   4. Labor union and their effect on inflation and growth of cities
   5. Solution?

I. Inflation - created by the problems of cities?
   1. How does this effect the city?
   2. Mass population increase could cause this to go even higher?
   3. Solution - gold curtail? - others?

V. Group dynamics session on problems
   A. Divide into two groups of 15 or 16 each
   B. Place desks in a circle
   C. Students are allowed to use notes on problems if

they wish.

D. Instill idea that teacher just a member of the group and his ideas or attitudes can be debated as well as anyone else in the group.

E. Get a rubber ball and point out that only the person with the ball can talk - anyone wanting the ball can raise their hand.

F. If you get the ball and don't want it then states: "You pass", and give the ball to another person.

NOTE: a tally sheet with students names on it showing responses is often a guide to see how well the problem is accepted or rejected with the group. A tape recording is often valuable to record original and valuable comments.

VI. A look at major cities.

(Use the inquiry approach. Group into three with map for each.)

A. Draw an outline map of a city.

1. Place within the following

a. Industries

b. Residential areas

c. Recreational areas

d. Commercial areas

e. Schools

f. Main means of transportation

2. Explain that transportation routes should be

set up first.

B. Examine a few maps of major cities and see if each group agreed with the actual construction of the city.

1. Paris
2. Berlin
3. London
4. New York

C. Construct a class map of one city using the guidelines set up in their groups.

D. Allow various students to come to the front of the class and place in pencil the various areas with class suggestions.

E. Handle all disagreements by vote with the majority ruling.

VII. Comparison of Cities

A. See report material

B. Map with population chart

This was done through a report giving basic facts about twelve major cities in the world and then contrasting the cities through the material learned. (1) Used one student to write report and give materials; (2) Listed all basic likenesses on board and then discussed using materials on the following pages as a guide.

"WORLD CITIES"

There are certain cities throughout the world that are called "world cities". These cities are usually great centers of population and wealth. They are great centers of political power and other important agencies. They are great ports and commercial areas. They are great centers of industry and manufacturing, of importing and exporting. Several of these twelve cities were "world cities".

A COMPARISON OF THESE TWELVE CITIES

(This outline is from a student report)

I. Location

- A. Located near some body of water
  - 1. Early times people stayed near water for
    - a. travel
    - b. communication
    - c. trade
  - 2. All these cities were quite old; originated in early times because of this
  - 3. Cities grew up where ocean going vessels stopped for supplies
    - a. These places developed into small communities
    - b. these are the communities where industries

were first set up--people began moving to these towns for jobs and the town became a city

4. Water transportation is another reason

a. Transportation by boat is still the best possible way to ship goods to other places

B. Thus, cities located on water have several advantages that others do not.

C. Most of the large cities in the world are quite old.

II. Transportation facilities

A. Water transportation in all these cities

B. All had other means of transportation

1. Other transportation for both the public and for commerce.

2. Most were terminals for large railroad networks and centers of air travel

3. facilities inside city include buses, subways, electric trains, tramcars, and large broad roads.

C. A conclusion we can make is that cities in general have and must provide transportation for the public and for commercial trade.

III. Industries

A. All of these cities are centers of manufacturing

and trade, exporting and importing.

1. Large factories are set up to provide goods for the people
2. This can be attributed to the Industrial Revolution.
    a. People began having their services done for them and industries produced their goods.
    b. They paid for them by working in the factories and earning money

B. Industries are usually set up where water transportation is available
    1. These cities are located on water so importing and exporting is profitable--water transportation is inexpensive

C. Also, they are set up where rail shipping is profitable

D. So another conclusion we can make is that industries are set up in places where shipping is available and low cost

E. Also we might add that these cities had many workers to run the factories so employment is not a problem in cities, but unemployment is.

IV. Political importance

A. Most are capitals of some kind

B. You can imagine that cities have problems that only the government can solve.

C. This is where a majority of the people live also.

D. Location is another advantage because these cities can be easily reached by people from other places.

E. We can say that most cities are centers of government.

VIII. Creative map of a future city

A. Requirements - keep as few as possible

1. It can be on land, under the sea, or in the air.
2. Year is 2500
3. Keep the problems in mind that construction can be curved by construction.
4. Size is 60 to 80 thousand
5. Construct a close up of one part of your city showing a commercial area and its transportation
6. Give each group a large sheet of paper and pencils or marking pens. They supply rulers and anything else.

B. Questions that could be thrown at the group to aid their collective thinking.

1. Are you going to supply agriculture and other

food supplies to your city? Water and oxygen? How?

2. How are you going to get needed sunlight to the people of your city?
3. How are you going to dispose of your wastes and pollution?
4. What provisions have been made for possible nuclear attack from another country?
5. What control would your government have and how does it show its control? What effect would your government have on the entire control of your country?
6. Do you see any problems your city has or could have in the future?

C. Evaluation of these maps.

1. Creativeness and the solving of possible problems to main aims.
2. Invited local planned - Don Morton, Benton-Franklin Planner, to help evaluate and make suggestions as to ideas.
3. Approach to questions asked in "B" and possible solutions should be included.

APPENDIX

B

LOCAL AREA PRE-TEST

1-5. History

Explain how the following got their names.

1. Benton County
2. Kennewick
3. Richland
4. Pasco
5. Prosser

6-10. Location

1. List the major towns or villages located in Benton County.
2. List the three major rivers found in Benton County.

11-15. Major occupations

1. The major employer firm in the Tri-Cities today is _____.
2. The major employer in Pasco is _____.
3. The major agriculture crop in Benton County is _____.

4-5. The reason Congress selected Hanford as their site in 1940 was _____ and _____.

16-20. General

1. _____ is the Kennewick City Manager.
2. _____ is the mayor of Kennewick.

3. _____ is how taxes are levied on homes in Kennewick.

4. _____ is called the bedroom city because of no large industries.

5. _____ sets the boundaries for the city limits in Kennewick.

DEVELOPMENT OF CITIES PRE-TEST

1-4. Explain the difference between the following:

1. City
2. Town
3. Village
4. Hamlet

5-10. Define the following terms:

1. Industrial Revolution
2. Urban
3. Depression
4. Rural
5. Metropolitan
6. Ghetto

11-15. List five main problems that exist in cities today.

16-20. Name five of the ten cities largest in population in the world today.

LOCAL AREA TEST

100 points

1-5. Name six zones you would find in a city.

6. _____ is when a section of land comes into the city.

7. _____ is changing the type of building on land use within a city.

8. A _____ is needed to have the local government consider changes in structure of zoning.

9. _____ is the way the local area assesses its taxes.

10. What do we mean by assessed valuation of land?

11. _____ is the number one hiring industry located in the Tri-Cities today. (more than one county)

12. Why is Richland located where it is today?

13. Give the location of the Tri-Cities in reference to its location in Washington State.

14. _____ was who Benton County was named after.

15. _____ is the Tri-Cities slum area.

16. What is a social problem?

17-21. List five social problems we have in the Tri-Cities.

22-24. Compare streets in Kennewick with those in Richland as to names, direction they run, and uniformity.

25-30. What does the following have to do with starting a

business in the Tri-Cities?

(a) business bond (c) building code (e) ordinances

(b) license (d) frontage

31. _____ is the major employer in Pasco.

32. _____ is the city of the three with the least industry.

33. _____ is the number of tax mills in Kennewick.

34. _____ is the number of tax mills in Pasco.

35. _____ is the number of tax mills in Richland.

36. _____ sets the zones within a city.

37-38. How did Pasco and Kennewick get their names?

39-41. The three main reasons for a change in the growth pattern of the Tri-Cities between 1910 and 1960 was:

42. What is the money amount of a tax mill?

43-48. Compute the taxes for the following:

(a) $25,000 home in Pasco

(b) $30,000 home in Richland

(c) 20 mill levy on a $12,000 business in Kennewick.

49-51. What are three advantages to living inside the city limits of Kennewick?

52-58. Using your map, tell me how to get to the following places by giving directions using streets along the way and an estimated distance from the scale:

(a) Valu-Mart to 415 Stevens in Richland

(b) Valu-Mart to Highlands Junior High at 425 South

Tweedt Street

(c) 101 East 15th to Highlands Junior High.

59. _____ is the county seat of Benton County.

60. _____ is the largest in population of the Tri-Cities and Benton County.

61-67. Give the three main types of city government and explain each.

68. _____ is the minimum wage that can be earned in Washington by law.

69. _____ is the main racial group that are migrant workers in Washington.

70. _____ is the major problem that migrant workers face when traveling into a new area to work.

71-76. List the five major towns in Benton County by size.

77. _____ is the county seat of Benton County.

78-79. Define a levy.

80. _____ is the largest minority group in Washington by population.

81 _____ is the number one crime committed by juveniles in Benton County.

82. _____ is the number one reason for the settling the Tri-Cities where it is today.

83-84. Give two examples of business misuse of the Columbia River using the following companies: Boise Cascade and Battelle Northwest.

85. _____ is the largest, population wise, city in Benton County.

86-89. Name the three rivers found in Benton County.

90. _____ is the oldest town in Benton County.

91 _____ is the city manager in Kennewick.

92-95. Name the counties that border Benton County.

96-100. Place the following towns on the map:

(a) Kennewick

(b) Richland

(c) Pasco

(d) Prosser

(e) Finley.

DEVELOPMENT OF CITIES TEST

75 points

Matching - 15 points - Use each answer only once.

_____1. ghettos

_____2. urban renewal program

_____3. suburbs

_____4. village

_____5. town

_____6. city

_____7. depression

_____8. slums

_____9. hamlet

____10. urban

____11. rural

____12. metropolitan

____13. Toyko

____14. New York

____15. London

a. a heavy populated area

b. agriculture and sparse population

c. second largest city in the world

d. a way to reconstruct the slums

e. largest city in the world

f. agriculture area of a population larger size than 500 people

g. the area around a city and including the city

h. the smallest political unit of all

i. the period in time when people moved away from a city

j. the center of transportation, recreation, etc.

k. run down area of a city

l. the second largest populated area on a main means of transportation

m. a place where a minority group lives

n. third largest city in the world

o. residential area around a city

Fill in the correct answer:

1. _____ was the only time the people moved away from the city back to the rural area.

2-3. _____ and _____ are two reasons for the first cities to be developed.

4. _____ _____ had the largest impact for people moving to the cities.

5-6. _____ and _____ are where most of the cities are located. (general terms)

7. _____ is the part of the city where the slums are located in Seattle.

8. _____ is the way we assess taxes, .001 or 1¢.

9. _____ free enterprise.

10. _____ small unit of resident within a suburb.

11. _____ is the age group in which crime is the highest.

12-13. _____ and _____ were the city's first means of transportation.

14. _____ _____ was when beauty and culture were the main aspects of the cities.

15. _____ is the number one problem in the news today concerning cities.

16-17. _____ and _____ are the only two major cities in the world, out of the top fifteen, not located on a major river or on the coast.

18-19. Why is the town often referred to as the middle man?

20-27. List and explain seven aims of future city planners to solve the problems of today.

28. _____ The concept of the city-state had its origins in (a) China; (b) Greece; (c) Rome; (d) Medieval Europe.

29. _____ The most important reason for the "urban revolution" of the 19th century was (a) the breakup of the Roman Empire; (b) the Renaissance; (c) the Napoleonic wars; (d) the Industrial Revolution.

30. _____ The first city to reach a population of one million was (a) Paris; (b) London; (c) New York; (d) Toyko.

31 _____ What percentage of Americans live in a city or a nearby suburb? (a) 30%; (b) 50%; (c) 70%; (d) 90%.

32. _____ The most urbanized nation in the world is (a) the Soviet Union; (b) Britian; (c) Australia; (d) the United States.

33. _____ People are attracted to cities by the prospect of (a) better economic opportunity; (b) opportunities to make friends; (c) cultural facilities; (d) all of these.

34. _____ In population, the two biggest cities (greater metropolitan areas) in the U.S. are New York and

(a) Chicago; (b) Los Angeles; (c) Philadelphia; (d) Detroit.

35. _____ The largest single source of a city's local revenue is (a) local income taxes; (b) sales taxes; (c) federal aid; (d) property taxes.

36. _____ One example of a planned city is (a) Calcutta; (b) Paris; (c) Shanghai; (d) Washington, D. C.

37. _____ Many cities in the U.S. lack the power to deal effectively with their problems because (a) city boundaries do not reflect the real boundaries of the city; (b) state legislatures are unwilling to grant broad powers to city governments; (c) power within the city is shared with special districts and authorities; (d) all of the above are true.

Four point essay--Give the four things a city must have to survive.

Ten point essay--List ten basic problems of cities and explain how each is a problem.

Five point essay--Show by illustration how the first cities were organized as for living areas of the various people. (peasants, leaders, etc.)

Five points--List in order of population the five largest cities in the world by the 1960 census.

APPENDIX

C

Experimental		Initials	I.Q.	Raw Score	Control		Initials	I.Q.	Raw Score
Boy	1	G.S.	119	129	Boy	1	R.S.	117	131
Girl	2	J.R.	115	121	Girl	2	L.B.	115	127
Girl	3	C.J.	125	165	Boy	3	J.M.	125	152
Boy	4	M.S.	109	117	Girl	4	S.R.	106	100
Boy	5	J.H.	123	138	Girl	5	B.S.	125	140
Girl	6	F.U.	118	132	Girl	6	C.W.	119	134
Girl	7	J.R.	105	123	Girl	7	B.S.	104	118
Girl	8	J.F.	117	120	Girl	8	S.T.	117	132
Girl	9	P.H.	81	65	Girl	9	J.P.	79	61
Girl	10	C.W.	121	138	Girl	10	D.G.	120	140
Girl	11	J.C.	108	115	Girl	11	J.B.	109	111
Girl	12	R.J.	121	138	Girl	12	S.F.	120	131
Boy	13	M.L.	95	92	Boy	13	S.M.	95	86
Boy	14	T.S.	101	90	Boy	14	H.B.	100	92
Boy	15	M.P.	126	162	Boy	15	T.H.	123	135
Boy	16	J.D.	113	124	Boy	16	R.B.	113	121
Girl	17	S.J.	107	113	Boy	17	S.L.	106	122

Experimental		Initials	I.Q.	Raw Score	Control		Initials	I.Q.	Raw Score
Boy	18	B.K.	88	90	Girl	18	L.B.	86	64
Girl	19	J.P.	134	173	Girl	19	L.R.	131	158
Girl	20	J.B.	116	141	Girl	20	L.S.	115	143
Girl	21	P.D.	102	114	Boy	21	L.A.	102	110
Girl	22	B.S.	99	96	Boy	22	S.W.	98	92
Boy	23	G.C.	103	107	Girl	23	T.B.	103	109
Girl	24	S.J.	116	122	Girl	24	K.M.	115	121
Girl	25	J.B.	123	148	Girl	25	D.B.	122	152
Girl	26	J.T.	117	128	Girl	26	L.W.	117	121
Boy	27	H.J.	113	118	Boy	27	D.J.	111	102
Boy	28	A.F.	102	100	Boy	28	T.B.	104	108
Boy	29	T.J.	112	122	Boy	29	R.B.	113	130
Boy	30	D.J.	120	142	Boy	30	T.H.	121	130
Girl	31	D.D.	103	99	Girl	31	R.C.	103	90
Girl	32	J.K.	106	104	Girl	32	B.B.	106	120
Girl	33	M.V.	98	103	Girl	33	M.Mc.	97	98
Girl	34	N.T.	136	162	Girl	34	T.M.	134	150

Experimental		Initials	I.Q.	Raw Score	Control		Initials	I.Q.	Raw Score
Girl	35	L.S.	101	98	Boy	35	R.B.	101	104
Girl	36	G.B.	116	130	Girl	36	C.T.	116	121
Girl	37	T.C.	86	64	Girl	37	D.Z.	88	68
Girl	38	A.B.	108	112	Girl	38	C.R.	108	118
Boy	39	C.K.	117	130	Boy	39	R.B.	117	118
Boy	40	B.T.	104	116	Boy	40	S.W.	103	110
Boy	41	T.E.	129	143	Boy	41	M.T.	128	144
Boy	42	L.C.	109	122	Boy	42	R.C.	109	118
Boy	43	R.B.	112	120	Boy	43	L.S.	112	122
Boy	44	J.B.	129	158	Boy	44	R.R.	128	130
Girl	45	L.C.	113	126	Girl	45	L.L.	114	120
Girl	46	T.R.	120	139	Girl	46	M.C.	121	130
Girl	47	G.G.	92	86	Boy	47	J.G.	90	100
Boy	48	T.B.	102	108	Boy	48	G.T.	102	104
Boy	49	M.N.	118	122	Boy	49	L.T.	118	108
TOTAL			5448	5915				5426	5746