When education is seen as both an art and a discipline, personal growth comes not only by admonition but by inspiration. When education begins with a felt need or concern, one's perspective is not destroyed but becomes a framework out of which the next meaningful step can more easily be taken.

--DAVID CASTLE

THE USE OF UNIPACS IN HIGH SCHOOL DISTRIBUTIVE EDUCATION

by

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I have a new appreciation for the dedication of Ben Rossow. It is only a shame that it came on the eve of his retirement.

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ABSTRACT

The purpose of this study was to prepare three self-instructional units (unipacs) and test them by comparing student achievement through the traditional method of instruction as compared to the unipac. The study attempted to determine whether there was a significant difference in achievement between the students in the two groups, whether the unipac could work at all in distributive education, and what the student reaction would be to them.

The study was limited to two marketing classes at Washington Senior High School in Sioux Falls, South Dakota.

At the end of each unit both groups were given identical written examinations. Scores were analyzed through frequency distributions, mean scores, and chi square. Also examined was the completion time and student evaluations.

Findings indicate that: (1) There is no significant difference in mean scores between the experimental and control groups; (2) there is no significant difference between the scores of the two groups when measured with a chi square at the .05 level of significance; (3) The unipac requires less time to complete than does regular classroom instruction on the same unit; (4) Students generally reacted favorably to this type of instruction.

On the basis of the findings the following conclusions can be drawn:

1. Unipacs can be used effectively in distributive education.
2. Students for the most part enjoy using unipacs.
3. Students using unipacs work at their own pace.
4. Students using unipacs do not have the benefit of class discussion.
5. There is no significant difference on a pencil and paper test in the level of achievement of students using unipacs as compared with those not using the unipac.
6. Unipacs can be produced in the students own area and used as part of the individual instruction program in distributive education.
7. It takes considerably more teacher time to prepare a unipac than it would for him to prepare a conventional lesson plan.
8. Students enjoy a change in the method of instruction.

CHAPTER I

INTRODUCTION

Distributive education programs in our nations schools have shown steady growth since their inception. During the period from 1939 to 1963 enrollment grew by five hundred and sixty three percent (Palmer a:85).

During the 1968-1969 school year one of the teachers in the Sioux Falls Public Schools began experimenting with a new type of self-instructional material in her junior high school home economics classes (Magdsick:Interview). Mrs. Pauline Magdsick produced a unit on the various units of measurement used in a cooking class. It was her feeling that she had been successful in teaching this unit to her students through the use of this pack. The writer immediately began to wonder if this technique might be put to use in distributive education.

Further investigation of the procedures and techniques revealed that Mrs. Magdsick had produced her materials from a mimeographed booklet she had received in one of her college education classes (How to Make a Unipac). It was further determined that she had written a packet of materials that was currently part of a library at Stanford University. She showed the writer a list of the materials that were

available at this center and it was quickly noted that nothing had been written on distributive education. The writer also noted that although it was felt by Mrs. Magdsick that these materials worked she had experimented without the benefit of a control group against which to compare her results.

After reviewing the facts the writer decided to produce three of these packets and test them in a distributive education program. Can these packets work in distributive education? The answer to this question was the reason for making this study.

Statement of the Problem

Can unipacs be effectively used in distributive education programs? The investigator measured the use of unipacs in the distributive education program he coordinated. The objectives of this investigation were:

1. To produce three unipacs in the area of distributive education.
2. To measure the achievement of students using these packs and compare them to others not using the packs.

Hypotheses to be Confirmed

1. There are certain areas of distributive education that the student can teach himself through the use of self-contained learning materials (unipacs).

2. There will be no significant difference in the achievement, on identical examinations covering the units in which unipacs were used, between the control group and the experimental group.

3. Students will react favorably, as measured by their responses on the evaluation form, to this method of instruction.

Limitations

1. The investigation was limited to the junior level distributive education classes at Washington Senior High School in Sioux Falls, South Dakota.

2. The investigation was limited to the students who were present in school on the days that the material was covered.

Definitions

Behavioral Objective. An objective in an intent

communicated by a statement describing a proposed change in behavior on the part of the learner. Learning results in a change in behavior.

Distributive Education. Distributive education is a program of instruction designed to give students the basic skills, knowledge, attitudes and understandings necessary for updating, advancement, entry, or preparation for additional education in marketing and distribution.

Distributive Occupation. Those occupations which are concerned with making available to consumers the goods and services produced by others

Unipac. A unipac is a self-contained set of teaching-learning materials designed to teach students a single concept and structured for individual and independent use in a continuous progress school program

Experimental Design

There were three major portions contained in the design of this study:

1. The development of the unipacs.
2. The field testing of the unipacs.
3. The experimentation.

Development of the Materials

During the 1969-1970 school year the writer developed three unipacs. These were designed to be used in the distributive education classes at Washington Senior High School as part of the regular curriculum. The three units written were:

1. What is D.E.?
2. Advertising Math for Distributive Education
3. Business Organization for Distributive Education

The investigator learned how to produce a unipac by completing a unipac called "A Unipac on How to Make a Unipac."

Field Testing of Materials

During this phase the materials were tested on the 1969-1970 distributive education classes at Washington Senior High School. The main purpose was to see if there were any portions of the packets that needed revision before conducting the experiment. Many inconsistancies, errors, hard to understand portions, etc. were discovered. After the field test the unipacs were re-written with the necessary corrections.

Experimentation

The experimental and the control groups consisted of the two marketing (junior level distributive education) classes at Washington Senior High School in Sioux Falls South Dakota during the 1970-71 school year. The reason that this school was chosen was that the investigator was employed there and had easy access to the groups. The marketing classes were chosen rather than the senior level distributive education class because there was only one distributive education class on the senior level and two on the junior level. Using the seniors for the investigation would have created supervision problems. The students in both classes (both groups) were placed there at random by our computor during our regular scheduling process.

The groups met during their regular class period at 9:30 or 10:30am each day respectively. The 9:30 group was chosen the control group and the 10:30 group was chosen the experimental group. This was determined by the flip of a coin.

The data were gathered by the use of two measuring instruments on each of the three units used. The first was used on both the control and the experimental groups. It was an examination designed to measure the knowledge gained

from the unit. The second instrument was only administered to the experimental group. It was an evaluation form that was filled out at the end of the unipac.

The control group received their instruction through the traditional method as the investigator had used in the past. The experimental group received a unipac and were instructed to complete them to the best of their ability. They were asked to make every attempt to figure out the various parts of the unipac on their own. They were also instructed to try to grasp the concepts on their own. If they had any difficulty they were told to consult another student and only as a last resort ask the instructor.

Each unipac included specific objectives and an overall objective. The students were told exactly what they were going to have to do upon completion of the unipac. Those people instructed through the traditional method were not given this information. This was because the control group was to receive their instruction in the same manner as they had received it in the past. The instructor had not, in the past, made behavioral objectives available to the students and therefore did not do so during the experiment.

The experimental group also had the advantage of self-tests. These appeared at the end of each lesson of the

unipac and were followed by an answer page so that the student could check himself. At the end of the unipac the student took a post test that he also checked himself. This post test was very similar in form to the exam used after completion of the unit that measured the students competence in the area. These exams are all included in the appendix.

The control group also had the use of self checks but they were not as structured as the self checks used by the experimental group. The instructor simply reviewed the important points of the lesson at the end of each class session and then again at the beginning of the next class session.

Through the use of these procedures and instruments the examiner obtained the findings reported in this paper. The data was analyzed by a series of statistical procedures. The analysis of the examination was to primarily determine whether there was a significant difference between the achievement of the groups on the written examination. These relationships were reported in terms of the number of incorrect responses on the examination for each group, the mean scores of each group, the proportion of students getting a particular number of responses incorrect, the

cumulative frequency of incorrect responses, the cumulative proportion of incorrect responses, and chi square was used to determine if significant differences existed between the groups on individual incorrect responses for each unit.

CHAPTER II

REVIEW OF LITERATURE

During the past few years the investigator has noted that many types of self-instructional materials have been developed. Although many studies have been made in this area the investigator found that little work had been done in its applications for distributive education. The investigator found no research in any area concerning the unipac.

The only material on the unipac available to the investigator was a mimeographed booklet called, "A Unipac on How to Make a Unipac." This described the unipac and differentiated it from other types of materials used for individual instruction. A review of this unipac reveals the following about the unipac:

1. "It is self contained. While it may have been designed as a part of a larger curriculum, it is a kind of learning module which can be plugged into other systems." (A Unipac on How to Make a Unipac:4)

2. "It's a set of teaching and learning materials--software, not hardware." It is not a machine although it may teach about machines. (A Unipac on How to Make a Unipac:4)

3. "It focuses on a single concept, one learnable idea." (A Unipac on How to Make a Unipac:4)

4. "It's designed for independent and individual use. You can use this without any help from others (independent) and you can use it at your own rate, in your own way, at any place and any time you choose." (A Unipac on How to Make a Unipac:4)

5. "It's published for and designed to be used by teachers who believe in and practice continuous progress." (A Unipac on How to Make a Unipac:4)

"A Unipac on How to Make a Unipac," further clarifies the definition of a unipac when it enumerates what a unipac is not. "And just to be sure that there's no confusion, a UNIPAC is NOT NOT NOT NOT

-a traditional textbook--although maybe some day textbooks may look like unipacs.

-a programmed text: you don't see any frames, do you?

-computor assisted instruction: you aren't plugged into a terminal now, are you?

-lesson plans--although for 25¢ we will send you our latest publication, 'Lesson Plans to Show Your Principal When He Asks for Your Lesson Plans.'

-a workbook: no blanks to fill it--yet.

-a curriculum unit: superficially it may look like those teaching units we used to develop back in the 40's and 50's, but--well, you figure out the difference." (A Unipac on How to Make a Unipac:5)

It seems that most of the research that has been done in the area of individual self contained learning units has been done in the area of programmed instruction. The interesting thing about the research that has been done though is that it usually compares one form of programmed instruction to another rather than comparing programmed instructional methods.

> Nearly half of the papers deal centrally with what we might call presentation variables--prompting and confirmation, branching, pairing, size of step, machine vs. text, programmed television, and so forth. Nearly 30 per cent deal chiefly with response modes--overt vs. covert, multiple choice vs. constructed responses, and the like. Among the remaining experiments are a considerable number of evaluative tests, which seek to compare the amount of learning from programs with the amount of learning from the conventional classroom teaching of the same subject. (Schramm:2-3)

Even if all of the rest of the research concerned comparing the traditional method with programmed instruction it would total less than 20%.

The research does definitely confirm that students do learn from programmed materials. (Schramm:3) In the studies

that compared programmed instruction with the conventional method the results usually tended to favor the program. (Silberman:185) It is difficult to make the comparison because students in the conventional classes may have received more material than those using the programmed instruction. The students in the groups that were programmed possibly concentrated only on the material for the test or the programs might have been written for the tests. Even though the programmed groups completed the work in less time it is difficult to say whether or not they have grasped as wide a range of information as the conventional groups. (Silberman:185) Another consideration in these experiments is the Hawthorne or novelty effect. This very probably was operating. (Schramm:5)

Many studies have shown the programmed technique to be significantly more effective than the conventional technique. (Silberman:185) There were extensive tests made of the programmed technique in industry for IBM which found the programmed techniques much superior to the traditional method of instruction. (Hughes a:43-54, b:23, c:225-31) It has been reported that in some studies the experimental group not only has done better on the examination immediately after instruction but also has shown better retention as the

result of later examinations. (Austwick) Other studies have brought out the fact that there are many other variables to consider in the study of programmed instruction compared to the traditional method. Essential elements such as when the programs are used, the abilities of the instructor, the type of programmed instruction, etc. cause the results to vary greatly. (Barcus:269-72) An important variable was the ability of the students used in the experiment. It has been found that high ability students do better with the program and low ability students do better with the conventional instruction. (Reed:476-84) & (Smith) It should also be noted that the interest of the students may drop as the novelty of any method of instruction wears off. (Porter)

Much of the work in programmed instruction has been done in the area of math. This area, it seems, lends itself to the use of the program more than some others. Studies done in the use of programmed instruction on the primary level seem to indicate that there is no significant difference between the performance of the groups. (Feldhusen:8-10) On the secondary level to those instructed through the use of the conventional method in eight out of nine achievement tests covering the material. (Brown)

Most of the studies compare programmed instruction with the conventional method on a pure basis, i.e. they either had the programmed material or they received conventional instruction. A few of the studies take a look at this in a little different light. They added programmed instruction to the units but did not eliminate conventional instruction. In these studies one group received regular traditional instruction and the other received regular instruction and programmed materials in addition.

Goldbeck found that by using a combination of programmed and conventional instruction in high school government classes student performance was raised significantly. The students in the experimental group performed significantly higher than those in the control group on two out of three units. He found that they also became more favorable in their attitudes toward the programs as time went on. (Goldbeck) In a similar experiment in basic electronics Hatch discovered that the same indicators predicted the level of a students performance on programmed materials as could be used as predictors in conventional instruction. (Hatch)

The great majority of the studies find no significant difference between the conventional and programmed

method of instruction. (Alter:55-78, Kornondy:17, Lambert: 485094, MICHAEL:411-18) Kopstein found that although students in the experimental group performed at a higher level at the beginning of the instructional period their interest declined more quickly than those in the control group. He concluded at the end of the experiment that there was no significant difference in the final analysis between the achievement in the two groups. (Kopstein:22)

The review of literature revealed that there may be something that is not being measured in the experiments. Many of the researchers talked about something that they had difficulty measuring or some variable that they could not measure. The investigator found that there was little research that compared self instructional materials with the traditional method and in his review came across no such comparative studies in distributive education.

CHAPTER III

FINDINGS

Introduction

The purpose of this investigation was to prepare three self-instructional units (unipacs) and test them by comparing student achievement through the traditional method as compared to the unipac. The study attempted to determine whether there was a significant difference between students in the two groups in terms of achievement and time to complete the work. It also took a look at the opinions of the students who used the unipacs.

The findings of this investigation are reported in three parts. The first part reports the results from the objective examinations given at the end of each unit, which measured differences in achievement. The second part compares the amount of time students used to complete the material with the time used in classroom instruction on the same unit. The third part reports the students reaction to the unipac as measured by the evaluation form at the end of each unit.

Examination

The following table illustrates the differences between the mean scores achieved on a written examination administered to the two groups. The scores are the number of incorrect responses. The differences between the two groups range from .23 points to .05 points. It indicates that the experimental group did slightly better than the control group on two of the units and the control group did slightly better than the experimental group on one of the units.

Table 1. Mean Scores Achieved by the Students on the Various Units of Instruction. (all scored indicate the number of incorrect responses)

Unit	$\bar{X}$	$\bar{Y}$	$\bar{X}-\bar{Y}$	Highest Possible
Advertising Math	4.21	4.41	-.20	25.00
What is D. E.?	1.50	1.27	-.23	43.00
Business Organization	5.05	5.10	+.05	29.00

(X=the control group and Y=the experimental group)

The table below compares the achievement of the individual students on the unit entitled, "What is D. E.?" It shows us that the range of scores achieved by the experimental

group on this unit was six, from 0 to 5 incorrect responses out of a possible 43. The control group had a range of ten, from 0 to 9 incorrect responses. It may also be noted that over 90% of the students in both groups made less than two incorrect responses on this unit.

Table 2. Frequency Distribution of the Number of Incorrect Responses on the Unit Entitled, "What is D. E.?"

Score = number of incorrect responses out of a possible 43

X = control group
Y = experimental group
fX = frequency of X
fY = frequency of Y
pX = proportion of X
pY = proportion of Y
cfX = cumulative frequency of X
cfY = cumulative frequency of Y
cpX = cumulative proportion of X
cpY = cumulative proportion of Y

Score*	fX	fY	pX	pY	cfX	cfY	cpX	cpY
0	7	4	.3500	.1905	7	4	.3500	.1905
1	6	11	.3000	.5238	13	15	.6500	.7143
2	5	4	.2500	.2381	18	19	.9000	.9048
3	0	0	.0000	.0000	18	19	.9000	.9048
4	0	1	.0000	.0476	18	20	.9000	.9524
5	1	1	.0500	.0476	19	21	.9500	1.0000
6	0	0	.0000	.0000	19	21	.9500	1.0000
7	0	0	.0000	.0000	19	21	.9500	1.0000
8	0	0	.0000	.0000	19	21	.9500	1.0000
9	1	0	.0500	.0000	20	21	1.0000	1.0000

*incorrect responses

The differences in the achievement of individual students on the "Business Organization" unit is reported in the next table. It is interesting to note the wide range of scores, 1 to 12 incorrect responses in the control group and 1 to 10 incorrect responses in the experimental group. The total possible number of responses was 29.

Table 3. Frequency Distribution of the Number of Incorrect Responses on the Unit Entitled, "Business Organization "

Score = number of incorrect responses out of a possible 29

X = control group — Y = experimental group

fX = frequency of X — fY = frequency of Y

pX = proportion of X — pY = proportion of Y

cfX = cumulative frequency of X — cfY = cumulative frequency of Y

cpX = cumulative proportion of X — cpY = cumulative proportion of Y

Score*	fX	fY	pX	pY	cfX	cfY	cpX	cpY
1	1	1	.0455	.0500	1	1	.0455	.0500
2	0	3	.0000	.1500	1	4	.0455	.2000
3	7	3	.3182	.1500	8	7	.3636	.3500
4	1	3	.0455	.1500	9	10	.4091	.5000
5	6	3	.2727	.1500	15	13	.6818	.6500
6	2	0	.0908	.0000	17	13	.7725	.6500
7	1	1	.0455	.0500	18	14	.7980	.7000
8	2	3	.0909	.1500	20	17	.9091	.8500
9	1	2	.0455	.1000	21	19	.9545	.9500
10	0	1	.0000	.0500	21	20	.9545	1.0000
11	0	0	.0000	.0000	21	20	.9545	1.0000
12	1	0	.0455	.0000	22	20	1.0000	1.0000

*incorrect responses

The achievement on the unit entitled, "Advertising Math" showed the wide range of scores. The table below shows a range for the control group from 1 to 16 and for the experimental group from 0 to 9 out of a possible 25 responses. The scores in the control group were more concentrated than those in the experimental group with most students, almost 90%, showing five or less incorrect responses.

Table 4. Frequency Distribution of the Number of Incorrect Responses on the Unit Entitled, "Advertising Math."

Score = number of incorrect responses out of a possible 25
X = control group
fX = frequency of X
pX = proportion of X
cfX = cumulative frequency of X
cpX = cumulative proportion of X
Y = experimental group
fY = frequency of Y
pY = proportion of Y
cfY = cumulative frequency of Y
cpY = cumulative proportion of Y

Score*	fX	fY	pX	pY	cfX	cfY	cpX	cpY
0	0	1	.0000	.0476	0	1	.0000	.0476
1	5	3	.2632	.1429	5	4	.2632	.1905
2	2	2	.1053	.0952	7	6	.3684	.2857
3	2	2	.1053	.0952	9	8	.4737	.3810
4	3	4	.1579	.1905	12	12	.6316	.5714
5	5	3	.2632	.1429	17	15	.8948	.7143
6	0	2	.0000	.0952	17	17	.8948	.8095
7	0	1	.0000	.0476	17	18	.8948	.8571
8	0	2	.0000	.0952	17	20	.8948	.9524
9	0	2	.0000	.0952	17	22	.8948	1.0000
10	0	0	.0000	.0000	17	22	.8948	1.0000
11	0	0	.0000	.0000	17	22	.8948	1.0000
12	1	0	.0526	.0000	18	22	.9474	1.0000
13	0	0	.0000	.0000	18	22	.9474	1.0000
14	0	0	.0000	.0000	18	22	.9474	1.0000
15	0	0	.0000	.0000	18	22	.9474	1.0000
16	1	1	.0526	.0000	19	22	1.0000	1.0000

*incorrect responses

Table 5. A Test of the Level of Significance Between the Groups Using the Unipacs and Those Instructed Through the Traditional Method (Chi Square with .05 level of significance)

Unit	Degrees of Freedom	Chi Square	.05 Chi Square
Business Organization	11	11.0631723404	19.675
What is D. E.?	9	4.3780908685	16.919
Advertising Math	16	10.9821300507	26.296

The .05 chi square above indicates the chi square taken from a table of chi squares under .05 opposite the indicated degrees of freedom. The above table indicates that there is no significant difference between the scores achieved by the control group and the experimental group. This is also indicated in the previous tables, 1 through 4, when one compares the similarities in achievement of the students.

Time Analysis

It is of interest to note the differences in the amount of time needed to complete the unipac as compared with the amount of time needed for in class instruction of the same unit. The following table reports the mean time for completion used by the two groups on the three units.

Table 6. A Comparison of the Mean Time Necessary to Complete the Units of Instruction in Hours (does not include examination time)

Unit	Unipac	Traditional Method
Advertising Math	1.90	2.75
What is D. E.?	.62	1.83
Business Organization	1.58	3.67

It can be seen from the table above that in every case the group using the unipac was able to cover the material more quickly than those not using the unipac. There are a number of reasons for this:

1. The group receiving the instruction via the traditional method had an opportunity to discuss the material. Those using the unipac simply were given the facts.

2. The group using the unipac could quickly review or omit material in which they were already competent.

3. The unipac was something different and the uniqueness of it caused students to be more interested.

4. All students could work at their own pace on the unipac while the regular classroom instruction was probably geared to the slower learner.

Student Reaction

Through the use of evaluation form at the end of the unipac the reaction of the students to this type of instruction was measured. The table below tells us that for the most part students found the material to be understandable. In the unit entitled "Advertising Math" only two students found the diagrams to be unclear. This was the highest number of students that had any problems on the units.

Table 7. A Compilation of the Answers to Questions #1, W the Directions and Diagrams Clear?, on the evaluation form

Unit	Yes	No
What is D. E.?	19	0
Advertising Math	18	2
Business Organization	18	1

The understandability by students is shown by their responses reported in the tabulation of Table #8. Once again only the advertising math unit showed a really noticeable number of students who had trouble understanding the material.

Table 8. A Compilation of the Answers to Questions #2, Was the material Understandable?, on the Evaluation Form

Unit	Yes	No
What is D. E.?	19	0
Advertising Math	17	3
Business Organization	18	1

Students were instructed to ask other students for help when they needed it. If they still had difficulty they could consult the teacher. The number of students needing teacher assistance with the lessons was small as noted in the table below.

Table 9. A Compilation of the Answers to Question #3, How Many Times Did You Consult the Teacher?, on the Evaluation Form

Unit (# of times)	0	1	2	3	4
What is D. E.?	17	1	1	0	0
Advertising Math	15	0	2	3	0
Business Organization	14	1	2	0	2

The above table reported teacher consultations required on the units. The next table shows the number of

times students needed to consult other students. There was a much higher incidence of student consultations than teacher consultations.

Table 10. A Compilation of the Answers to Question #4, How Many Times Did You Consult Other Students?, on the Evaluation Form.

Unit(# of times)	0	1	2	3	4	5	6	7	8	9	10	11	12	13
What is D. E.?	16	2	1	0	0	0	0	0	0	0	0	0	0	0
Advertising Math	6	2	4	2	2	1	1	1	0	1	0	1	0	0
Business Organization	3	3	4	0	1	1	0	1	0	0	0	0	0	0

The next table shows the particular lessons where students needed help. It helps us pin point particular areas of difficulty. In particular we should note lesson number five on the "Advertising Math" unit. This lesson seems to have caused the most problems to the students.

Table 11. A Compilation of the Answers to Questions #5, On Which Lessons Did You Need Help?, on the Evaluation Form

Unit (Lesson#)	1	2	3	4	5	6	7	8	ALL
What is D. E.?	0	0	3	1	0	0	0	0	0
Advertising Math	0	0	2	2	5	2	0	0	1
Business Organization	0	0	0	1	3	2	1	1	0

Many of the evaluation responses do not equal the total number of students involved. This is because some students did not answer all of the questions. The last question was the most difficult to tabulate since it asked students to explain their answer. The explanations are listed following the next table.

Table 12. A Compilation of the Responses to Question #6, Did You Enjoy This Unipac? Why?, of the Evaluation Form

Unit	Yes	No
What is D. E.?	15	3
Advertising Math	15	5
Business Organization	12	7

Reasons for answering yes:

What is D. E.?

It was easy to understand. (5 students)

It was easy to go back and review. (2 students)

Because it gave me a better understanding of D. E. and DECA (2 students)

I've always liked D. E. and I think we should know all about the program before we work with it.

I already knew this stuff.

I like this kind of work.

We could go as fast as we wanted to.

Because I'm interested in distributive education.

Because it was very interesting.

Advertising Math

It was different. (3 students)

Interesting. (2 students)

Learned more than if it was just out of a book.

I liked it because you can go as you want.

You can do it at your own speed.

It left us on our own.

It would have been better if each lesson was explained to us.

It lets you work at your own rate, also there is no one standing over your shoulder.

I think it's fun working with figures.

Business Organization

It was fun. (2 students)

It was a change of pace.

It was interesting.

I enjoy working by myself.

Reasons for answering no:

What is D. E.?

I don't enjoy work in unipacs.

I'd rather work in the workbook.

The majority of the material is already known to me.

Advertising Math

It was boring but the problems were fun to do.

Math doesn't interest me.

I don't see why I have to know this.

I hate math.

Because teachers are being paid to teach and not to make up a long exercise and make their students do it instead of explaining it.

Business Organization

Too boring. (2 students)

I don't like to memorize words and their definitions.

It was too hard.

It is no fun.

It's stupid kind of and won't help us poor people.

CHAPTER IV

SUMMARY

The investigator tested the use of unipacs in high school distributive education at Washington Senior High School in Sioux Falls, South Dakota. Three unipacs were produced by the investigator and used in one of the marketing classes at the school. The other class received its instruction through the traditional method.

The three units were spread throughout the year and after each unit both groups were given an identical examination to test their competency. The group using the unipac was also given an evaluation form to complete which was to measure their opinion concerning this type of instruction.

All three hypotheses were confirmed at several points in the investigation. The use of the unipac with success confirms the assumption that there are areas of distributive education that can be taught by using a unipac. The scores on the examinations at the close of the three units indicated that there was no significant difference in the achievement of the students in the two groups. The responses on the evaluation form indicate that the reaction of the students to this type of instruction is generally favorable, at least if it is used periodically.

Conclusions

1. Unipacs can be used effectively to teach in some areas of distributive education.

2. Unipacs can be produced in a students own area and used as part of his individualized instruction.

3. Unipacs can be used to free the teacher for individualized instruction or other duties.

4. The actual production of unipacs is a long and tedious process. The preparation time needed to prepare units of instruction to be taught by unipacs is much longer than the time needed to prepare the traditional lesson.

5. In some areas there will be no significant difference in the achievement of the distributive education student instructed by the traditional method when compared with those using unipacs.

6. Students, for the most part, enjoy using unipacs occasionally.

7. Students seem to enjoy a change in the method of instruction.

8. Students using unipacs, most of the time, will

not require as much time to complete the work as they would using the traditional method.

9. Students using unipacs can work at their own pace.

10. Although there seems to be no significant difference in the scores on written examinations between students using unipacs and those receiving instruction through the traditional method, in this experiment students receiving instruction through the traditional method had a wider range of scores on the written exam. This could be because the students who used the unipacs had behavioral objectives given to them and the other students did not.

11. Students using the unipacs do not have the benefit of class discussion of the material which often brings out more applications for the material.

Recommendations

1. More research needs to be done in the area of self instructional methods for distributive education.

2. More research needs to be done in the testing and production of unipacs.

3. There is a need for a great supply of unipacs. If every distributive education coordinator could produce just one and deposit it in a central location this would be a great asset to distributive education.

4. Additional research needs to be done to determine exactly what the benefits of the traditional method are. Although test results were very close for both groups the investigator had the feeling that the students receiving instruction through the traditional method were getting a broader understanding of the units.

5. This investigation could be conducted again with groups in different schools or in different cities so that one group could not find out what the other group was doing until after the experiment.

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APPENDIX

WHAT IS DISTRIBUTIVE EDUCATION?

by Mr. Ira Martel, Coordinator
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Washington Senior High School
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PRE-TEST

This pre-test is designed to determine whether you need to do any or all of the lessons in this unipac. Answer the questions with complete honesty. You will correct the test yourself and therefore only you will know the results. DO NOT GUESS!!

Circle T or F to indicate whether your answer is true or false.

T	F	1.	I know what a unipac is and how to use it.	Lesson I
T	F	2.	I know how this unipac will help me decide whether or not to enroll in the senior level distributive education program.	Lesson I
T	F	3.	Distributive Education means you go to work in the afternoon.	Lesson II
T	F	4.	You must have a job to enroll in distributive education during your senior year and you must have this job before you enroll.	Lesson II
T	F	5.	Distributive education students do not go to college.	Lesson II

T F 6. Distributive education is open to students who are interested in careers marketing, merchandising, and management. Lesson II

T F 7. Distributive education students go to school in the morning and also have a full time job in the afternoon or evening. Lesson III

T F 8. Distributive education students are paid for their work while they are involved in on-the-job instruction. Lesson III

T F 9. Distributive education students can not work in banks. Lesson III

T F 10. Distributive education and DECA are the same thing. Lesson IV

T F 11. Local chapters affiliate directly with the national association. Lesson IV

T F 12. There are 50 state associations that belong to the national association of DECA. Lesson IV

Use the key below to correct your pre-test. Do the lessons indicated at the right of the questions you missed or are not completely sure about.

key---1-t, 2-f, 3-f, 4-f, 5-f, 6-t, 7-f, 8-t, 9-f, 10-f, 11-f, 12-f.

Lesson I

WHAT THE HECK IS THIS?

You have in your hand a unipac. That's the word that has been coined to identify this type of package of learning materials designed to teach you a single concept or idea. This unipac involves the distributive education program and is designed to introduce you to it.

You have taken the pre-test and on the basis of your answers you were advised to complete this lesson first, so let's go.

As you near the end of your junior year and the completion of your course in marketing you have an important decision to make. Should you enroll in distributive education during your senior year or should you pursue another program? As with any question you have to answer the more information you have the greater the chance that you will make the right decision. To gain a basic understanding of what D. E. is complete each lesson carefully before going on to the next. By learning all you can about D. E. you will be better able to plan your program for next year.

You'll notice that each lesson includes a practice exercise. These are designed to give you a little practice

and reinforce what you have learned. These are important and should be completed before going on to the next lesson.

OBJECTIVES

Overall Objective:

To give the student enrolled in a distributive education preparatory course an opportunity to learn what distributive education actually is in order to allow him to make a more intelligent choice as to whether or not to enroll in the senior level course.

Specific Objectives:

1. At the end of this unit, the student--given a list of situations and occurances--will be able to indicate whether they are true or false.

2. At the end of this unit, the student--given a list of occupations--will be able to pick out those that are distributive.

3. At the conclusion of this unit, the student--given a series of multiple choice questions--will be able to choose the correct answer from the choices given.

The student will be able to meet the specific objectives with 80% accuracy.

Lesson II

What is D. E.?

Distributive education is a program of instruction in marketing, merchandising, and management. It is designed to provide the student with the basic skills, knowledge, attitudes and understandings necessary for updating, advancement, preparation for additional education in marketing or entry into a distributive occupation.

All occupations have certain basic skills and knowledge that must be learned in order to enter them and/or advance. Occupations in marketing and distribution require use to aquire certain knowledge, skills, attitudes and understanding also. These include:

I-Marketing Functions

- A. Selling
- B. Pricing
- C. Buying

II-Factors Affecting Marketing

- A. Advertising
- B. Visual Merchandising
- C. Customer Services
- D. Personnel

III-Financing Marketing

A. Credit

B. Capital

C. Records

IV-Economics

V-Organization of Distributive Functions

VI-Product Knowledge

VII-Business Procedures

VIII-Preparation for Job Assignments

IX-Social Skills

Distributive education offers instruction in the marketing of goods and services. The instruction may lead to occupations in retailing, risk bearing, advertising, financing, wholesaling, storing, transportation and many more.

If you are not now employed in marketing the distributive education program will help you get what you need to enter the field of distribution of your choice. If you are already working and would like to pursue your education in the area in which you are employed you can also do this. In that case distributive education will help you advance.

Distributive education is a very wise route to follow if you intend to go on and continue your education in

distribution. The distributive education program will give you a good foundation for post high school or college courses in marketing.

Practice Exercise:

True-False

T F 1. Distributive Education is a program of instruction in marketing, merchandising, and management.

T F 2. Distributive education students can not go to college.

T F 3. In distributive education you will have the opportunity to acquire the basic skills, knowledge, attitudes, and understandings necessary in marketing.

T F 4. Distributive education is only for people interested in careers in marketing.

Now let's see how well you have done. Turn the page for the correct answers and explanations.

Answers to Practice Exercise:

1. TRUE

2. FALSE Many occupations in distribution lend themselves to additional education beyond the high school distributive education program. Included among these is that of the distributive education coordinator, and many marketing management and research positions. Although most jobs in distribution do not require a college education a few do. Many others require some additional education past high school and there are many post-secondary distributive programs set up for this purpose.

3. TRUE

4. TRUE Distributive education is designed for people interested in marketing and distribution. It only offers instruction in marketing and therefore people interested in trade, industrial, secretarial, or other non distributive occupations should enroll in programs that offer instruction in their area of interest rather that D. E.

Well, did you get them all right? If you feel confident that you have mastered this lesson go on to lesson three.

Lesson III

Putting What You Learn Into Practice

At Washington Senior High School those students who are enrolled in distributive education during their senior year receive on the job instruction during the afternoon as part of the D. E. program. All students are employed at a certified business laboratory each day after school. The certified business laboratory is a business establishment in Sioux Falls that has been approved by the school, after meeting certain requirements, to offer instruction on the job with credit toward graduation. By working regularly you will have an opportunity to apply those things you learn in the classroom almost immediately.

During the morning in school you will enroll in all of the courses necessary for graduation with a regular diploma. In addition to these you will be enrolled in the distribitive education class which will include both individual and regular classroom instruction. Your regular classroom instruction will cover general marketing concepts and your individualized instruction will cover material peculiar to your occupational area such as ready to wear, shoes, credit, advertising, display, product information, etc.

On the job students work between 15 and 33 hours per week and receive instruction while being paid for their services. The average distributive education student at Washington High School will earn between $1500 and $2000 during their senior year in D. E.

Most occupations that are involved with the distribution of goods and services qualify for instruction under the distributive education program. Some typical businesses in which students work are:

restaurants
automobile dealers
grocery and meat markets
manufacturers sales jobbers
insurance
hotel and motel
transportation
banking
service stations
speciality stores
warehouse wholesalers
agents and brokers
advertising
real estate

speciality service stores

theaters

and many more

It's time to find out if you're still with us. Turn the page and complete the practice exercise.

Practice Exercise

Fill in the blanks:

1. Students enrolled in D. E. at Washington Senior High School receive _____ _____ _____ _____ at a certified business laboratory during the afternoon.
2. By actually _____ in the afternoon you will have the opportunity to apply your classroom instruction every day.
3. Students enrolled in the distributive education program at Washington Senior High School work at a certified business laboratory between _____ and _____ hours per week and usually earn between $_____ and $_____ during the school year.
4. Most occupations involved in the _____ of goods and services qualify for instruction under the distributive education program.

Circle all of the occupations, businesses or occupational areas that would qualify for instruction in the distributive education program.

carpenter	brick layer
welder	history teacher
waitress	clothing salesperson

car salesman

automotive parts man

warehouse manager

plumber

motel manager

hotel desk clerk

theater manager

banker

service station attendant

wholesaler

secretary

real estate broker

advertising man

tailor

steel worker

beach comber

fisherman

T. V. repairman

Answers to Practice Exercise:

1. Students enrolled in D. E. at Washington Senior High School receive on the job instruction at a certified business laboratory during the afternoon.
2. By actually working in the afternoon you will have an opportunity to apply your classroom instruction every day.
3. Students enrolled in the distributive education program at Washington Senior High School work at a certified business laboratory between 15 and 33 hours per week and earn between $1500 and $2000 during the school year.
4. Most occupations involved in the distribution of goods and services qualify for instruction under the distributive education program.

Circle all of the occupational areas, occupations, or businesses that would qualify for instruction under the distributive education program. (those that are in capitals would qualify)

carpenter	brick layer
welder	history teacher
WAITRESS	CLOTHING SALESPERSON
CAR SALESMAN	WHOLESALER

AUTOMOTIVE PARTS MAN	secretary
WAREHOUSE MANAGER	REAL ESTATE BROKER
plumber	ADVERTISING MAN
MOTEL MANAGER	tailor
HOTEL DESK CLERK	steel worker
THEATER MANAGER	beach comber
BANKER	fisherman
SERVICE STATION ATTENDANT	TV repairman

If you missed any of the questions in the practice exercise re-read the lesson before going on to lesson four.

Lesson IV

What is DECA?

DECA stands for the Distributive Education Clubs of America. DECA is the only national youth organization especially for students enrolled in distributive education programs. It is a vital and integral part of the distributive education program at Washington Senior High School.

DECA is organized on three levels:

1. The National Association
2. The 52 State Associations that belong to the national association.
3. The thousands of Local Associations that affiliate with the state associations.

The various divisions of DECA are designed to allow participations by all those interested in the club and/or affiliated with a distributive education program. The five divisions of DECA are:

1. The High School Division-Open to students enrolled in high school distributive education programs.
2. The Junior Collegiate Division-Open to students in distributive education

programs beyond the high school level that do not lead to a bachelors degree.

3. The Collegiate Division-The division is open to students who are enrolled in college programs for distributive education teacher education. These are people who are or are preparing to become distributive education teachers, coordinators, teacher educators, teacher-coordinators, or supervisors.
4. The Professional Division-Open to teachers, businessmen and others interested in distributive education and DECA.
5. The Alumni Division-Open to all former distributive education who are not members of a regular division (#1, 2, & 3 above) of DECA

DISTRIBUTIVE EDUCATION AND DECA ARE NOT THE SAME THING. Nobody takes DECA. Students are enrolled in distributive education and then may become members of DECA as part of the program. DECA is only one of four parts of the D. E. program. The parts are:

1. Basic Classroom Instruction

2. Individualized Instruction
3. On the Job Instruction
4. DECA

All four parts of the program are important and although DECA is an integral part it is not and can not be allowed to become the whole thing.

Participation in the many DECA activities is a fun way to learn many of the things you will need to know in your distributive occupation. The activities are many and include:

Employee-Employer Banquets and other functions
The State, Local, District, Regional, and National Leadership Conferences.
Fund Raising Activities
Social Activities
Civic Activities
Public Relations Activities

Be sure to take a look at the state and national DECA handbooks to familiarize yourself with the precise workings of this important organization. Your D. E. coordinator can make this available to you.

Well, have you got it? If so, turn the page and begin to work on your Denny DECA badge.

Practice Exercise:

Fill in the blanks:

1. DECA stands for The _____ _____ _____ ___ _____.
2. Local chapters affiliate with the _____ association.
3. DECA is only _____ of the distributive education program.
4. If you wish to secure additional information about DECA the best place to find it is in the _____ _____.
5. John graduated from the local high school last year. He was a distributive education student and would like to continue his affiliation with DECA. John should join the _____ division.
6. Mr. Jones, the Sears manager, wishes to become a member of DECA. He should joing the _____ division.
7. Joe graduated from high school in 1967 and enrolled in a program at a Junior College in Supermarket Operation. Upon completion of his program Joe decided that he would like to become a D. E. teacher-coordinator and he enrolled at the State University in a program leading to a Bachelor of Science degree in distributive education.

Joe is now a senior at the State University. Joe most likely is a member of the _____division of DECA.

The answers are on the next page. If you're satisfied with your answers turn the page and see how you've done.

Answers to Practice Exercise:

1. DECA stands for The Distributive Education Clubs of America.
2. Local chapters affiliate with the state association.
3. DECA is only part of the distributive education program.
4. If you wish to secure additional information about DECA the best place to find it is in the DECA Handbook.
5. John graduated from the local high school last year. He was a distributive education student and would like to continue his affiliation with DECA. John should join the Alumni Division.
6. Mr. Jones, the Sears manager, wishes to become a member of DECA. He should join the Professional Division.
7. Joe graduated from high school in 1967 and enrolled in a program in Supermarket Operation. Upon completion of the program he decided that he would like to become a distributive education teacher-coordinator and he enrolled at the State University in a program leading to a Bachelor of Science degree in distributive education. Joe is now a senior at the State University. Joe most likely is a member of the Collegiate division of DECA.

Now that you have completed this unipac it is time to see if you have mastered the important points. If you are satisfied with your progress go on to the post-test. If not review the lessons about which you are not sure.

POST-TEST

True-False-Circle T or F

T F 1. Distributive education means you go to work.

T F 2. Distributive education students can not go to college.

T F 3. One of the basic areas of study in distributive education is in the area of marketing functions.

T F 5. Most jobs in marketing do not require a college education.

T F 6. Some distributive education students (those in cooperative programs) are given on the job instruction during their senior year.

T F 7. Students interested in learning the insurance business would be eligible for entry into the D. E. program.

T F 8. Students interested in becoming a secretary should sign up for D. E.

T F 9. Students who are interested in becoming a welder should sign up for D. E.

T F 10. There are 50 State Associations that belong to National DECA.

Multiple Choice-Circle the correct answer.

1. A good source of information about DECA is a) the dictionary, b) Principles of Retailing, c) the DECA Handbook, d) the encyclopedia.
2. Which of the following is not a division of DECA? a) Alumni, b) High School, c) Professional, d) Junior High School, e) Junior Collegiate, f) Collegiate
3. Students who are enrolled in distributive education and work at a certified business laboratory a) receive on the job instruction but are not paid, b) are paid a regular wage but receive no instruction, c) receive on the job instruction and are paid at a rate equal to ½ the minimum wage, d) are paid at the regular rate for beginning employees and receive on the job instruction.
4. On the job students work a) between 15 and 33 hours per week, b) between 15 and 48 hours per week, c) as many hours as they can, d) full time, e) between 5 and 40 hours per week.
5. Distributive education is a program of instruction designed to give students the basic a)skills, b)knowledge, c) attitudes, d) understandings, e) a, b, & d, f) a & b, g) all of the above.

From the following list circle all of the occupations that are distributive:

restaurant manager	waitress	auto salesman
atomic scientist	automobile parts man	grocery clerk
stock boy	stockroom manager	supermarket manager
cashier	industrial salesman	insurance broker
hotel desk clerk	hotel manager	advertising man
advertising salesman	advertising layout man	advertising counselor
pilot	air conditioning repairman	airline ticket agent
architect	attorney	banker
bank loan officer	baker	musician
beautician	cabinet maker	mens wear salesman
fashion buyer	carpenter	pastor
photographer	real estate broker	theater manager
welder	warehouse manager	plumber
contractor	dancer	dog catcher
doctor	service station attendant	draftsman
wholesaler	machinist	

When you feel you have done your best turn to the next page and check your answers.

Answers for Post-Test

True-False

1. False — Although many distributive education students do work as part of the program this is not completely necessary.
2. False — Many distributive education students attend college often on DECA Scholarships.
3. True
4. Omit
5. True
6. True
7. True
8. False — This is not a distributive occupation. A student interested in becoming a secretary should probably sign up for the vocational secretarial course.
9. False — This is not a distributive occupation. Students interested in becoming welders should probably sign up for vocational welding or diversified occupations.
10. False — There are 52 state associations. These include all 50 states plus the District of Columbia and Puerto Rico.

Multiple Choice

1. c) the DECA Handbook
2. d) Junior High School
3. d) are paid at the regular rate for beginning employees and receive on the job instruction.
4. a) between 15 and 33 hours per week
5. g) all of the above

The distributive occupations are:

restaurant manager
stock boy
cashier
hotel desk clerk
advertising salesman
bank loan officer
fashion buyer
wholesaler
auto salesman
grocery clerk
supermarket manager
insurance broker
advertising man
advertising counselor
airline ticket agent
banker

waitress
automobile parts man
stockroom manager
industrial salesman
hotel manager
advertising layout man
real estate broker
warehouse manager
service station attendant
mens wear salesman
theater manager

Well how did you do? If you missed more than five re-do the unipac. If you missed less than five responses go back and re-do the lessons in which the material is covered. After you have done this go on to the evaluation.

Post-Evaluation

Now that you have completed the unipac it is yours to keep and use for future reference. Please answer the questions below and turn in this sheet to your teacher. Feel free to make any comments you wish. It is not necessary to include your name on this sheet.

1. Were the directions and diagrams clear?

2. Was the material in the lessons understandable?

3. How many times did you consult the teacher?

4. How many times did you consult other students?

5. In which lessons did you need help?

6. How many minutes did you spend completing this unipac?

7. Did you enjoy this unit? Explain.

Distributive Education Examination What is D. E.?

True-False

T F 1. Distributive Education students can not go to college.
T F 2. Distributive Education offers instruction in office and secretarial occupations.
T F 3. If you want to go to college and study marketing you should not take D. E. in high school.
T F 4. You can not take D. E. unless you already have a job in distribution.
T F 5. Distributive education is designed only for people who are interested in careers in marketing and distribution.
T F 6 The average distributive education student at Washington High School will earn over $5,000 during his senior year.
T F 7. Distributive education students at Washington Senior High School work between 15 and 33 hours per week.
T F 8. DECA is an integral part of the distributive education program.
T F 9. Distributive education and DECA are the same thing.
T F 10. Most jobs in marketing do not require a college education.

Multiple Choice-Circle the correct answer. (only one answer is best)

1. Distributive education is a program of instruction in a) selling, b) advertising, c) bookkeeping, d) marketing, distribution, merchandising, and management.
2. There are a) 49, b) 50, c) 51, d) 52, e) 53 state associations that belong to DECA.
3. Which of the following is not a division of DECA? a) High School Division, b) Junior Collegiate Division, c) Collegiate Division, Alumni Division, d) Professional Division, e) National Post Collegiate Division.
4. A good source of information about DECA is a) The Educational Encyclopedia, b) The Dictionary, c) the DECA Handbook, d) Principles of Retailing, e) Marketing and Distribution.

5. Students who are enrolled in cooperative distributive education programs during their senior year at Washington Senior High School work a) wherever they can find a job, b) wherever they can make the most money, c) wherever they can get the most hours, d) at a Certified Business Laboratory.

From the following list, circle all occupations that are distributive.

restaurant manager
forest ranger
bricklayer
stock boy
cashier
cement mason
plasterer
fashion buyer
banker
waitress
secretary
dental assistant
advertising man
attorney
auto salesman
service station attendant
dentist
airline ticket agent
carpenter
theater manager
retailer
wholesaler
supermarket manager
grocery clerk
taxi driver
chemist
diesel mechanic
salesman

ADVERTISING MATH

for

Distributive Education

by
Mr. Ira Martel, Coordinator
Distributive Education
Washington Senior High
Sioux Falls, South Dakota

PRETEST

This pretest is designed to determine if you need to do any or all of the lessons in this unipac. Answer the questions with complete honesty. You will correct the test yourself and therefore only you will know the results. DO NOT GUESS!

Circle T or F to indicate whether your answer is true or false.

T	F	1.	I know what a unipac is and how to use it.	Lesson I
T	F	2.	I understand why it is important for me to learn about advertising math.	Lesson I
T	F	3.	There are 6 points to an inch.	Lesson II
T	F	4.	There are 72 points to a pica.	Lesson II
T	F	5.	There are 18 line of 18 point type to an inch.	Lesson III
T	F	6.	A column inch is a space one inch square.	Lesson IV
T	F	7.	An agate line is a space one line square.	Lesson IV
T	F	8.	The milline rate is the rate per million lines.	Lesson V

T F 9. There are 25 agate lines to a column inch. Lesson V

T F 10. I am familiar with and can calculate the milline rate and the cost per page per thousand. Lesson V & VI

T F 11. The cost per page per thousand is the rate you are charged per page if you buy one thousand pages of advertising in a newspaper or magazine. Lesson VI

Use the key below to correct your pretest. Do the lessons indicated at the right of the questions you missed or are not completely sure about.

key= 1-t, 2-t, all the rest should be false.

LESSON I

WHAT THE HECK IS THIS?

You have in your hand a unipac. That's a word that has been coined to identify this type of package of learning materials designed to teach you a single concept or idea. The concept to be learned by completing this unipac involves mathematical concepts used in advertising.

You have taken the pretest and on the basis of your answers you were advised to do this lesson first, so let's go.

Every marketer today is aware of the importance of advertising in the marketing mix. You are a future leader in marketing and distribution therefore it is important that you be familiar with advertisings importance and how to use it effectively. Advertising math is an important facet in our overall understanding of advertising. To get as much as possible out of this unipac carefully complete each lesson and be sure you have grasped the important points before going on to the next lesson. By learning to use advertising math you will be better able to plan, execute, and judge the effectiveness of your advertising program.

You'll notice that each lesson includes a practice exercise and/or an assignment. A practice exercise is just that, a little bit of practice to test your knowledge or give you a chance to test or explore an idea. An assignment is something different, it may take a little more work and cause you to really put on your thinking cap.

Do you have to do the assignments and practice exercises? Oh, come on now--you sound like that little brother or sister you can't stand.

OBJECTIVES

Overall Objective: To give the distributive education student a basic understanding of the mathematical concepts most often used in advertising.

Specific Objectives:

1. At the end of this unit, the student--given a list of terms and a list of definitions--will be able to pair the proper term with its definition.
2. At the conclusion of this unit, the student--given a group or problems which make use of the material contained in this unit--will be able to correctly solve the problems.
3. At the conclusion of this unit, the student--given a situation--will be able to determine whether it is true or false.

The student will be able to meet the specific objectives with 80% accuracy.

LESSON II

THE POINT SYSTEM

When we deal in advertising we must not only be familiar with the language of the media but also with their system of mathematics. The system used in the print media is known as the point system. This is the standard measurement used by printers for type, borders, and rules.

A point is approximately 1/72 of an inch, therefore there are about 72 points in an inch. 72 points are actually slightly less than an inch but the difference is so small that for all practical purposes we may consider one point to be 1/72 of an inch. The point is most often used in measuring type height and the space between lines.

When measuring type size we measure only the height. This is because the width will vary as some letters are wider than others, i.e. a W is wider than an I. Type is a rectangular piece of metal with a raised letter on it. These are pressed against the paper and used to make the impression of the various letters.

When type is referred to as six point type or eight point type, etc. this is the measurement of the entire body of the letter (piece of type), including the portion that

does not print. The height of the face (printing surface) will be less than that of the body (entire piece of type). The face (printing surface) of a 12 point W is only about 9½ points high, the other 2½ points are taken up by the shoulder (the portion of the type that does not print).

Twelve points equal one pica. As we said above there are approximately 72 points in an inch, therefore there are 6 picas in an inch. The pica is used mainly by the printer to measure the width of columns and lines but they are not often used by the advertiser. We will therefore not dwell on it.

Most testual material is set solid. This means that the space between the lines is that provided by the shoulder of the type. When it is desirable to have more space between the lines, for the more open appearance, we can place some spacing materials between the lines of type.

A lead (pronounced led) is a type of spacing material commonly used between the lines. It is a thin strip of metal, usually two points thick. Leads come in thicknesses of 1, 2, 3, or 4 points. We should therefore specify the size that we want used in our ad. If there is no size specified it is usually assumed that the

advertiser wants two point leads. The amount of leading depends on the size of the type face. The larger the type face the more leads we usually use.

PRACTICE EXERCISE:

Fill in the blanks.

1. The system of mathematics used by printers is known as the _____ _____.
2. A point is approximately _____ of an inch.
3. There are _____ points in an inch.
4. Twelve points equal _____ _____.
5. _____picas equal one inch.
6. When measuring type we measure only the _____.
7. Material that has been set without leads is said to have been set_____.
8. The main factor in determining the amount of leading is the _____ of the _____.

After you have completed these questions check your answers on the next page.

Now that you have completed the practice exercise, let's see how well you have done.

1. The system of mathematics used by printers is known as the point system.
2. A point is approximately 1/72 of an inch.
3. There are 72 points in an inch.
4. Twelve points equal one pica.
5. Six picas equal one inch.
6. When measuring type we measure only the height.
7. Material that has been set without leads is said to have been set solid.
8. The main factor in determining the amount of leading is the size of the type.

Well, how did you do? Did ya get 'em all right? If ya did go on to the next lesson. If you missed any of the questions go back and re-read the lesson.....then try again.

LESSON III

How Much Type Can Fit Into a Given Space?

Now that we know how to measure type we want to be able to determine how many lines of type of a given size will fit into the space we have available. The table below will quickly give you this information:

Type Size	Lines Per Inch (Set Solid)
5 point	14.400
5½ point	13.091
6 point	12.000
8 point	9.000
10 point	7.200
12 point	6.000
14 point	5.143
18 point	4.000
24 point	3.000
30 point	2.400
36 point	2.000
48 point	1.500
60 point	1.200
72 point	1.000

This table or the formula from which it is derived

may be used to determine how many lines of type will fit into a given space. You may either use the table (if it is available) or the following formula:

$$\frac{\text{(ONE INCH) 72 POINTS}}{\text{THE TYPE SIZE}} = \text{THE NUMBER OF LINES PER INCH}$$

If we had 12 point type we would work the formula as follows:

$$\frac{\text{72 Points}}{\text{12 Points}} = \text{6 Lines Per Inch}$$

Practice Exercise:

Using the formula for lines per inch, complete the table below.

Type Size	Lines Per Inch (Set Solid)
5 point	
5½ point	
6 point	
8 point	
10 point	
12 point	
14 point	
18 point	
24 point	
30 point	
36 point	
48 point	
60 point	
72 point	

Now check your answers with the table on page 83. If you miss any check your math. If your errors seem to be other than computational you need to carefully review the use of this formula.

Lesson IV

Space Measurements in Advertising

There are two basic units of measurement used in the print media to measure advertising space:

1 - column inches

2 - agate lines (or lines)

A column inch is a space measuring one inch by one column. In most newspapers the columns are 11 picas wide but this is not true for all publications or even all newspapers, widths of columns do vary. Of course the depth of a column inch is always one inch.

Newspaper space is often sold by the column inch, i.e. $3 per column inch. If a newspaper had eight columns on each page and was 22 inches deep (22" is fairly standard) there would be 176 column inches to a page (22 inches X 8 columns=176 column inches). If you as an advertiser wished to purchase a full page ad in this newspaper, at $3 per column inch, it would cost $528 (22 inches X 8 columns = 176 column inches, 176 column inches X $3 per column inch = $528).

The line or agate line is a space one column wide and one line deep (a line=1/14th of an inch). In the last lesson it was noted that the 5½ point type may be set

13.091 lines to the inch (more than 13 and less than 14). 5½ point type is also called agate type and this is where the expression agate line comes from.

Some publications sell space by the agate line. If we must determine the size of an ad in inches we divide the number of agate lines by 14. A 140 line ad would be 10 inches in depth (140/14=10).

Many magazines sell space is sold by the page or fraction thereof, usually in units of:

1 page	1/3 page
2/3 page	1/4 page
1/2 page	1/6 page

Practice Exercise

1. The two basic units of measurement in the print media used for measuring advertising space are the _____ _____ and the _____ _____.

2. The column inch occupies a space _____ _____ deep and _____ _____ wide.

3. An agate line occupies a space _____ _____ deep and _____ _____ wide.

4. If you wish to purchase an ad three columns wide and 10 inches deep, at $3 per column inch, the space will cost $_____. If the price was $1 per agate line, the space would cost $_____.

No go on to the next page and check your work.

Practice Exercise:

1. The two basic units of measurement in the print media used for measuring advertising space are the agate line and the column inch.

2. The column inch occupies a space one inch deep and one column wide.

3. An agate line occupies a space 1/14th inches deep and one column wide.

4. If you w ish to purchase an ad three columns wide and 10 inches deep, at $3 per column inch, the space will cost $90.00. If the price was $1 per agate line, the space would cost $420.00.

Remember you are the teacher. If you are satisfied with your progress up to this point go on to the next lesson. If not, review those points on which you are still hazy.

Lesson V

Cost Per Reader: The Milline Rate

It is difficult to compare the costs of various newspapers and magazines on the basis of their basic charges. Because of wide differences in circulation we need to find a common denominator to make accurate and meaningful comparisons. To accomplish this we use the milline rate for newspapers and the cost per page per thousand for magazines.

The milline rate is the cost per agate line per million of circulation. Since only a few newspapers have circulations over one million and most newspaper circulations are well below one million we must adjust the cost to a per million rate to make a comparison. This rate is known as the milline rate and is determined through the use of the following formula:

$$\frac{1{,}000{,}000 \times \text{the cost per line}}{\text{the actual circulation}} = \text{the milline rate}$$

If a newspaper had a circulation of 50,000 and charged $2.80 per column inch we would find the milline rate as follows:

1. Determine the cost per agate line.
   $2.80 per column inch
   14 lines per column inch
   $2.80 ÷ 14 = 20¢ per agate line.

2. Determine the circulation of the newspaper. circulation 50,000
3. Plug the factors into the formula and work out the problem.

$$\frac{1{,}000{,}000 \times \$.20(\text{the cost per line})}{50{,}000 \text{ (actual circulation)}} = \frac{200{,}000(1{,}000{,}000 \times .20)}{50{,}000} = \frac{20}{5} = 4$$

The milline rate is therefore $4 or $4 per line per million. If a second newspaper had a circulation of 30,000 and charged $2.10 per column inch ($.15 per agate line) the milline rate would be:

$$\frac{1{,}000{,}000 \times .15}{30{,}000} = \frac{15}{3} = \$5 \text{ per line per million}$$

This shows us very quickly that, all other things being equal, the advertising in the second newspaper is about 25% more expensive than that in the first. If we had only compared the basic price charged and not looked at the circulation our answer would have been just the opposite.

Now let's see how well you can figure milline rates.

Practice Exercise:

1. The Chicago Daily News charges $23.80 per column inch and has a circulation of 500,000. The milline rate is $_____.

2. The Chicago Tribune charges $2.00 per agate line and has a circulation of 800,000. The milline rate is $_____.

3. The Chicago American charges $28.00 per column inch and has a circulation of 400,000. The milline rate is $_____.

4. The milline rate is the _____.

Satisfied with your answers? If so, go on to the next page and check your answers.

Answers to Practice Exercise:

1. The Chicago Daily News charges $23.80 per column inch and has a circulation of 500,000. The milline rate is $3.40.

   $23.80 per column inch ÷ 14 agate lines per inch = $3.40 per agate line

   $$\frac{1,000,000 \times \$1.70}{500,000} = \frac{1,700,000}{500,000} = \frac{17}{5} = \$3.40 \text{ per line per million}$$

2. The Chicago Tribune charges $2.00 per agate line and its circulation is 800,000. The milline rate is $2.50.

   $$\frac{1,000,000 \times \$2.00}{800,000} = \frac{2,000,000}{800,000} = \frac{20}{8} = \$2.50$$

3. The Chicago American charges $28.00 per column inch and has a circulation of 400,000. The milline rate is $5.00.

   $28.00 per column inch ÷ 14 agate lines per inch = $2.00 per agate line.

   $$\frac{1,000,000 \times \$2.00}{400,000} = \frac{2,000,000}{400,000} = \frac{20}{4} = \$5.00 \text{ per line per million}$$

4. The milline rate is the cost per line per million.

Well, how did you come out? If you didn't you had better go back over the points you missed. If you're ready go on to the next lesson.

Lesson VI

Cost Per Reader: Cost Per Page Per Thousand

The cost per page per thousand helps us to compare magazine rates. It works in magazines as the milline rate does in newspapers. This gives us a common denominator for quick and easy comparisons. The formula is:

$$\frac{\text{rate per page x 1,000}}{\text{actual circulation}} = \text{cost per page per thousand}$$

If a magazine had a circulation of 400,000 and charged $2500 per page the cost per page per thousand would be:

$$\frac{2,500 \times 1000}{400,000} = \frac{2,500,000}{400,000} = \frac{25}{4} = 6\tfrac{1}{2} = \$6.25 \text{ per page per thousand}$$

If you feel you have mastered this formula, go on to the practice exercise on the next page.

Practice Exercise:

1. Look magazine charges $53,200 per page and has a circulation of 7,600,000. The cost per page per thousand is $_____.

2. Life magazine charges $52,540 per page and has a circulation of 7,400,000. The cost per page per thousand is $_____.

3. The Readers Digest charges $54,000 per page and has a circulation of 16,500,000. The cost per page per thousand is $_____.

4. Playboy charges $27,000 per page and has a circulation of 3,000,000. The cost per page per thousand is $_____.

After you have completed the problems turn to the next page and see how well you have done.

Answers to Practice Exercises:

1. Look magazine charges $53,200 per page and has a circulation of 7,600,000. The cost per page per thousand is $7.00.

$$\frac{53,200 \times 1,000}{7,600,000} = \frac{53,200,000}{7,600,000} = \frac{532}{76} = \$7.00 \text{ per page per thousand}$$

2. Life magazine charges $52,540 per page and has a circulation of 7,400,000. The cost per page per thousand is $7.10.

$$\frac{52,540 \times 1,000}{7,400,000} = \frac{52,540,000}{7,400,000} = \frac{5254}{740} = \$7.10 \text{ per page per thousand}$$

3. Readers Digest has a circulation of 16,500,000 and charges $54,000 per page. The cost per page per thousand is $3.27+.

$$\frac{54,000 \times 1,000}{16,500,000} = \frac{54,000,000}{16,500,000} = \frac{540}{165} = \$3.27+ \text{ per page per thousand}$$

4. Playboy charges $27,000 per page and has a circulation of 3,000,000. The cost per page per thousand is $9.00.

$$\frac{27,000 \times 1,000}{3,000,000} = \frac{27,000,000}{3,000,000} = \frac{27}{3} = \$9.00 \text{ per page per thousand}$$

If you feel you have mastered the material in this lesson go on to the post test.

POST - TEST

Now it's time to see how well you have done in completing and learning the material in this unipac. Complete the questions below:

Fill in the blanks

A point is approximately (1)_____of an inch, therefore there are (2)_____points in an inch. When measuring type we always measure the (3)_____.

A (4)_____is a thin metal strip used for spacing between lines.

A (5)_____is one sixth of an inch.

Type Size	Lines Per Inch(set solid)
5 point	(6)_____
5½ point	(7)_____
6 point	(8)_____
8 point	(9)_____
10 point	(10)_____

There are two basic units of measurement in the print media:

1. (11)_____
2. (12)_____

A column inch is a space measuring one (13)_____ by one (14)_____. Newspaper space is usually sold by the (15)_____or (16)_____. An (17)_____ is a space measuring one column by approximately 1/14th of an inch. Most magazines sell space by the (18)_____ or (19)_____.

The New York Daily News has a circulation of 2,000,000 and charges $42 per column inch. The milline rate is (20) $_____.

The New York Times has a circulation of 1,700,000 and charges $35 per column inch. The milline rate is (21) $_____.

The Sioux Falls Argus Leader has a circulation of 55,000 and charges $2.80 per column inch. The milline rate is (22) $_____.

The Oskaloosa Daily Herald has a circulation of 9,000 and charges 4¢ per agate line. The milline rate is (23) $_____.

The Harvard Business Review charges $1,800 per page and has a circulation of 80,000. The rate per page per thousand is (24) $_____.

Time magazine charges $29,000 per page and has a circulation of 3,550,000. The rate per page per thousand

is (25) $_____.

Newsweek charges $17,000 per page and has a circulation of 2,000,000. The rate per page per thousand is (26) $_____.

After you have completed this test to the best of your ability turn to page100 for the answers.

Answers to Post-Test

1. 1/72	10. 7.2	19. page
2. 72	11. agate lines.	20. $1.50
3. height	12. column inches	21. $1.47
4. lead	13. column	22. $3.64
5. pica	14. inch	23. $4.44
6. 14.4	15. column inch	24. $22.50
7. 13.091	16. agate line	25. $8.17-
8. 12	17. agate line	26. $8.50
9. 9	18. agate line	

Now check yourself against the scale below:

all right Great. Do the evaluation on the next page

24-26 right	Excellent. Look over the points you missed and after you have mastered them go on to the evaluation.
22-24	Very Good. Go over the points you missed then go on to the evaluation.
19-21	Pretty Good. You're pretty good but you should have done better. Go back and review the points you missed. After you are sure you have mastered them go on to the evaluation.
16-18	Fair. Read the lessons containing the material from the questions you missed. After you have done this re-take this entire test.
less than 16	Go back to the pre-test and start all over.

Evaluation

Answer the following questions and turn this page in to your instructor.

1. Were the directions and diagrams clear?

2. Was the material in the lessons understandable?

3. How many times did you need to consult with the teacher?

4. How many times did you need to consult with other students?

5. In which lessons did you need help.

6. Did you enjoy this unit? Explain.

ADVERTISING MATH EXAMINATION

I - Matching

Place the letter of the term in column 1 next to the appropriate definition in column 2

1	2
a-point system	____spacing material used between lines
b-72	____the direction in which we measure type
c-twelve	____points in an inch
d-six	____picas in an inch
e-width	____points in a pica
f-height	____cost per line per million
g-lead	____type set with no leads
h-solid	____printers system of measurement
i-milline rate	
j-four	

II-Problems

Place the answers to the following problems in the space provided. Use the back of this page for scratch paper.

1. _____lines of 24 point type can be set to an inch.
2. _____lines of 8 point type can be set to an inch
3. The Los Angeles Times has a circulation of 1,000,000 and charges $31.50 per column inch. The milline rate is $_____.
4. The Bozeman Chronicle has a circulation of 3000 and charges $1.40 per column inch. The milline rate is $_____.
5. The Minneapolis Tribune has a circulation of 300,000 and charges $2.00 per agate line. The milline rate is $_____.
6. The DECA Distributor has a circulation of 120,000 and charges $1000 per page. The cost per page per thousand is $_____.
7. The National Farm Magazine has a circulation of 500,000 and charges $2500 per page. The cost per page per thousand is $_____.

III-True False

T F 1. The two basic measurements used in newspaper advertising for the sale of space are the column inch and the agate line.

T F 2. An ad that measures five columns by five inches is ten column inches.

T F 3. There are fourteen column inches in an agate line.
T F 4. There are 72 points in an inch.
T F 5. There are twelve picas in an inch.
T F 6. The milline rate is the rate charged advertisers when they buy a million lines of advertising at one time.
T F 7. Magazine space is usually sold by the page or fraction of a page.
T F 8. All newspapers have the same milline rate.
T F 9. An inch of type set with 18 point type will contain four lines.
T F 10. An agate line occupies a space one column wide and 1/14 of an inch deep.

BUSINESS ORGANIZATION

FOR

DISTRIBUTIVE EDUCATION

Ira Martel, Coordinator
Distributive Education
Washington Senior High
Sioux Falls, South Dakota

PRETEST

This pretest is designed to help you determine the areas of business organization that you need to study. Answer the following questions with complete honesty. You will correct the test yourself and therefore only you will know the results. Do not guess! If you do not know an answer leave it blank. After you have completed the test do the lesson indicated next to the questions you left blank or answered wrong.

T	F	1.	I know what a unipac is and how to use it.	Lesson 1
T	F	2.	I understand why it is important for me to learn about business organization.	Lesson 1
T	F	3.	The sole proprietor assumes unlimited responsibility for all business debts.	Lesson 2
T	F	4.	The most common type of business organization is the sole proprietorship.	Lesson 2
T	F	5.	A partnership is a contractual relationship.	Lesson 3
T	F	6.	A partnership is a voluntary relationship.	Lesson 3
T	F	7.	A partnership must be organized for a profit.	Lesson 3
T	F	8.	A limited partnership is not the same as a general partnership.	Lesson 4
T	F	9.	The promotor begins and furthers the organization of the corporation.	Lesson 5
T	F	10.	The incorporators must apply to the Secretary of State for a charter in the state in which they wish to incorporate.	Lesson 5
T	F	11.	A corporation is an artificial being.	Lesson 6
T	F	12.	To start a corporation there must be at least three incorporators.	Lesson 6
T	F	13.	I know what the articles of incorporation are and what they should include.	Lesson 7
T	F	14.	The book value of a share of stock is the net assets of the corporation divided by the number of outstanding shares.	Lesson 8

T	F	15.	The holder of preferred stock can not receive any dividends unless they are declared by the board of directors.	Lesson 8
T	F	16.	The stockholder is the owner of the corporation.	Lesson 9
T	F	17.	A stockholder has the right to examine the books of the corporation.	Lesson 9

If your answers to any or all of the questions was false or if you left any or all of the questions blank do the corresponding lesson. If all of your answers were true you should have written this unipac.

Lesson I

WHAT THE HECK IS THIS?

You have in your hand a unipac. That is a word that has been coined to identify this type of package of learning materials designed to teach you a single concept or idea. The concept to be learned through the use of this unipac involves the three main types of business organizations.

You have taken the pretest and on the basis of your answers you were advised to do this lesson first, so let's go.

Every businessman must have at least a basic knowledge of business organization. You are a future business leader, therefore it is important that you complete this unipac carefully and try to grasp as many points as you can. By learning the rights and responsibilities of each of the organizational forms you will be able to predict, with reasonable accuracy, what actions different types of businesses with which you deal may take. You should also get some kind of an idea of how others will expect you to act in business situations.

You'll notice that each lesson concludes with a "Practice-Exercise" and/or an "Assignment." A practice

exercise is just that--a little bit of practice to test your knowledge or give you a chance to test or explore an idea. An assignment is something different; it may take a little more work and cause you to really put your thinking cap on.

Do you <u>have</u> to do the assignments or the practice exercises? Oh, come on now--you sound like that little brother or sister of yours that you can't stand.

OBJECTIVES

Overall Objective: To give the distributive education student a basic understanding of the three main types of business organizations.

Specific Objectives:

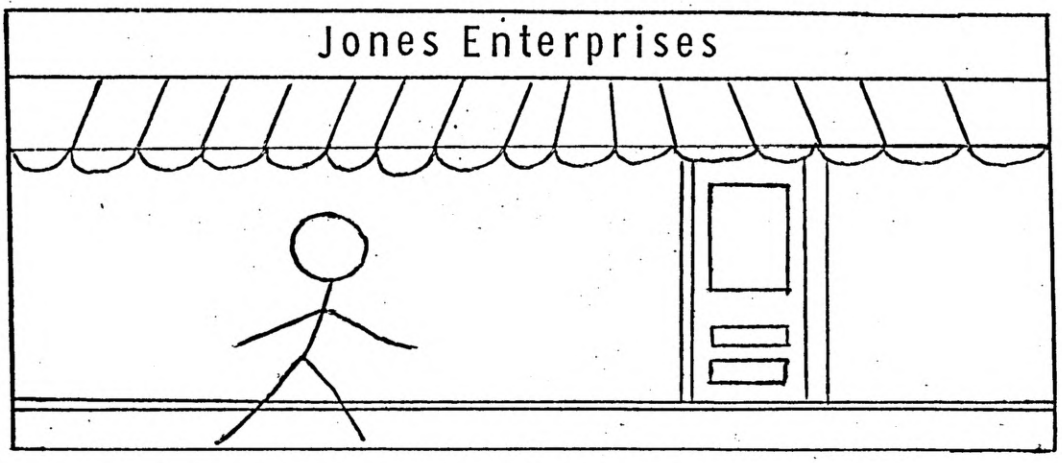
1. At the end of this unit, the student--given a list of terms and definitions--will be able to pair the proper term with its definition.
2. At the conclusion of this unit, the student--given situations applied to the forms of business organization--will be able to give a yes or no answer as to whether this situation could occur in the organization indicated.
3. At the conclusion of this unit, the student--given a case describing a firms' problem--will be able to choose from multiple choice alternatives the correct solution.
4. At the conclusion of this unit, the student--given a situation--will be able to determine whether it is true or false.

The student will be able to meet the specific objectives with at least 80% accuracy.

Lesson II

The Sole Proprietorship

Probably the type of business organization most familiar to you is the sole proprietorship. This is the most common type of business organization under our present system.



The sole proprietorship is the most simple type of business organization. It is owned and operated by one person, sometimes with a few additional employees. Some examples of businesses in this community that are probably sole proprietorships are:

1. your local bakery
2. your neighborhood restaurant
3. your local TV repair shop

4. your local florist
5. your local service station
6. your local laundry
7. your local hardware store
8. your local drug store

The sole proprietor takes full responsibility for all debts of the business. This means that if the business is unable to meet its obligations the creditors may cause personal property to be used to satisfy the business obligations.

Many businessmen prefer to organize their businesses as sole proprietorships because they want to be their own boss and be responsible to and for themselves only.

Practice Exercise:

Fill in the blank spaces below to see if you have grasped the main points of this lesson.

1. The most common type of business organization under our present system is the _____ _____.
2. The sole proprietor is responsible for all _____ of the firm even to the extent that his _____ _____ could be used to settle the claims.

3. Many businessmen prefer to organize as a sole proprietorship because they want to be their own _____.

4. The sole proprietorship is owned by _____ person.

After you have completed these questions, turn the page and see how you've done.

Now that you have completed the practice exercise, let's see how well you have done.

1. The most common type of business organization under our present system is the sole proprietorship.
2. The sole proprietor is responsible for all debts of the firm even to the extent that his personal property could be used to settle the claims.
3. Many businessmen prefer to organize as a sole proprietorship because they want to be their own boss.
4. The sole proprietorship is owned by one person.

Grading Scale:

all 5 responses right - go on to the next lesson

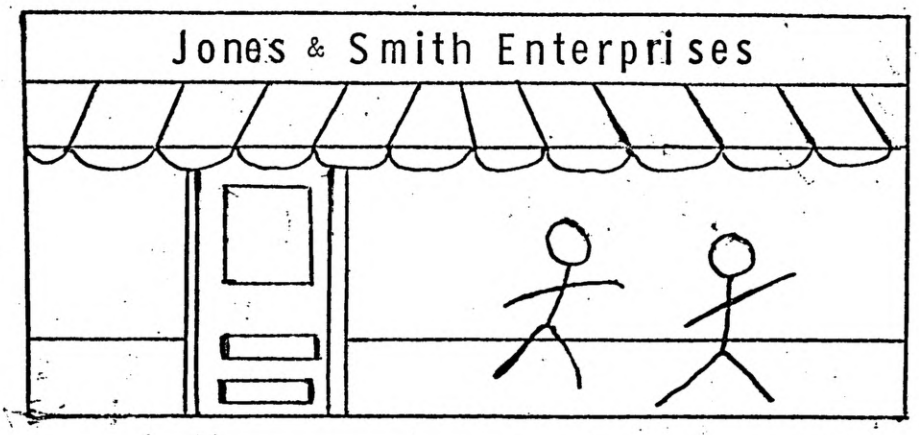
3 or 4 responses right - go back over the lesson and review the points you have missed

0 - 2 responses right - go back to sleep

Lesson III

The Partnership

The single or sole proprietorship is the most common type of business. More businesses in the United States are organized as sole proprietorships than are organized under any of the other forms.



Many businesses have more than one owner. These are multiple ownership type organizations. One of the most common types of multiple ownership businesses is the partnership. A partnership is:

> "an association of two or more persons to carry on a business for profit"[1]

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[1] Uniform Partnership Act, Sec. 6 (1); Carle v. Carle Tool and Engineering Co., 33 N.J.S. 469, 110 A. 2d 568.

The owners in this type of business are called partners or copartners.

> "Partnerships are contractual relationships, not imposed by law. They are formed, governed, and terminated by agreement."[2]

The agreement here is completely voluntary.

To form the partnership the various parties usually agree to contribute labor, capital, skill, etc. When all parties to the partnership are satisfied with the contributions or promises of contributions by the other potential copartners, the agreement is made and the partnership is officially formed.

When the partnership is formed there will often be a set of rules that are set down in writing. This set of rules, which is actually the agreement, is known as the Articles of Copartnership. It is always advisable, but not mandatory, to have the partnership agreement in writing. This may avoid later disagreements and help to settle any controversies that do arise. The agreement should include:

1. beginning date
2. ending date (if applicable--most partnerships are for an indefinite period)

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[2]Wallner v. Schmitz, 239 Minn. 93, 57 N.W.

3. partners names
4. type of business
5. location of firm
6. the agreement
7. asset distribution upon dissolution
8. procedure to be followed upon the death of a partner
9. name of the company
10. owners contributions of capital, labor, skill, etc.
11. withdrawal procedures
12. distribution of profits and losses

If you feel confident that you have grasped the material in this less --turn the page and let's find out partner.

Practice Exercise:

In order to determine whether you have mastered the important points in this lesson answer the following true-false questions. After you have answered all of the questions below turn the page and check your answers. DO NOT GUESS!

T F 1. The partnership is one of the most common types of multiple ownership businesses.

T F 2. A partnership is an agreement between two or more people.

T F 3. An agreement or set of rules drawn up during the formation of a partnership are the Articles of Copartnership.

T F 4. The law requires that every partnership have a written copy of their Articles of Copartnership.

T F 5. A partnership need not be organized for profit.

After you have finished this exercise turn the page and see how you have done.

Answers to true-false questions on page 117.

1. True
2. True
3. True
4. False
5. False

According to law the partnership agreement need not be written unless the partnership is organized for more than one year. Partnerships that are set up for an indefinite period could end before the end of a year and therefore need not be written. This is the case even if the partnership in fact does last longer than one year. The only type of partnership agreement that must be written is one that calls for the establishment of a partnership for a limited period of time but for more than one year. This is why the answer to question four is false.

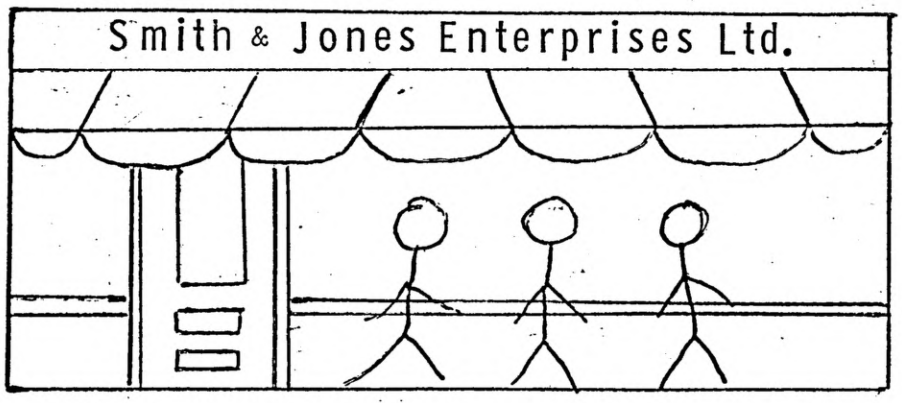
According to the Uniform Partnership Act and after court tests a partnership must be organized for a profit. If it is not organized for the purpose of making a profit it is not a partnership but rather falls under another type of multiple ownership business organization form. This is why the answer to question number five is false.

If you feel that you have a good grasp of the material in this lesson go on to the next. If you are still unsure about any of the points go over the lesson again.

Lesson IV

The Limited Partnership

The type of partnership with which we are most familiar is the general partnership. This was discussed in lesson three. In many states a modification of this type of organization has been adopted under certain circumstances. The limited partnership has become especially popular in Canada.



The people who are partners in a limited partnership may be either special or general partners. The general partner has the same rights and responsibilities as any partner in a general partnership, unlimited liability. The limited partner contributes capital to the firm but does not assume any liability beyond his original investment. The general partner is liable for all debts of the business.

The limited partnership can not be formed unless the rights and responsibilities of the various partners are written and recorded with the County Recorder of Deeds. This is to protect those who deal with the company from being taken by general partners who try to appear as limited partners to escape their liability.

The public must be informed when a limited partnership is organized. This is usually done by placing the word limited or the abbreviation Ltd. after the name of the company. In this way all who deal with the company are put on notice that not all of the partners have unlimited liability.

The limited partner does not participate in the management of the firm or in the decision making process. His participation in profit sharing and proceeds in the event of dissolution are also usually limited. These must be clearly explained in the written agreement.

Practice Exercise:

Fill in the missing words or phrases.

1. The _____partner is liable for all debts of the firm.
2. The _____partner is liable only to the extend of his original investment.
3. To form a limited partnership a _____copy of the agreement must be filed with the County Recorder of Deeds.
4. The limited partnership must place the word_____ or the abbreviation _____ after its name.
5. The _____ partner does not participate in the management of the firm or in the decision making process.

After you have completed these questions turn the page for the answers.

Answers to practice exercise on previous page.

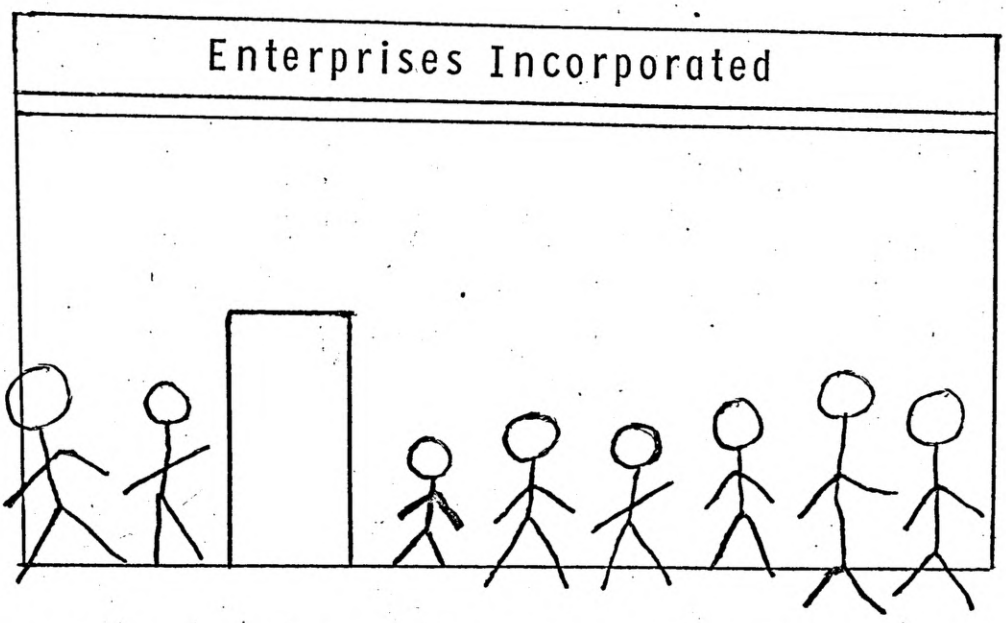
1. The general partner is liable for all debts of the firm.
2. The limited partner is liable only to the extend of his original investment.
3. To form a limited partnership a written copy of the agreement must be filed with the County Recorder of Deeds.
4. The limited partnership must place the word limited or the abbreviation Ltd. after its name.
5. The limited partner does not participate in the management of the firm or in the decision making process.

Well, how did you do? Get'em all right? If not, be sure to review the points you missed.

If you are satisfied with your progress up to this point go on to the next lesson.

Lesson V

The Corporation: Definitions



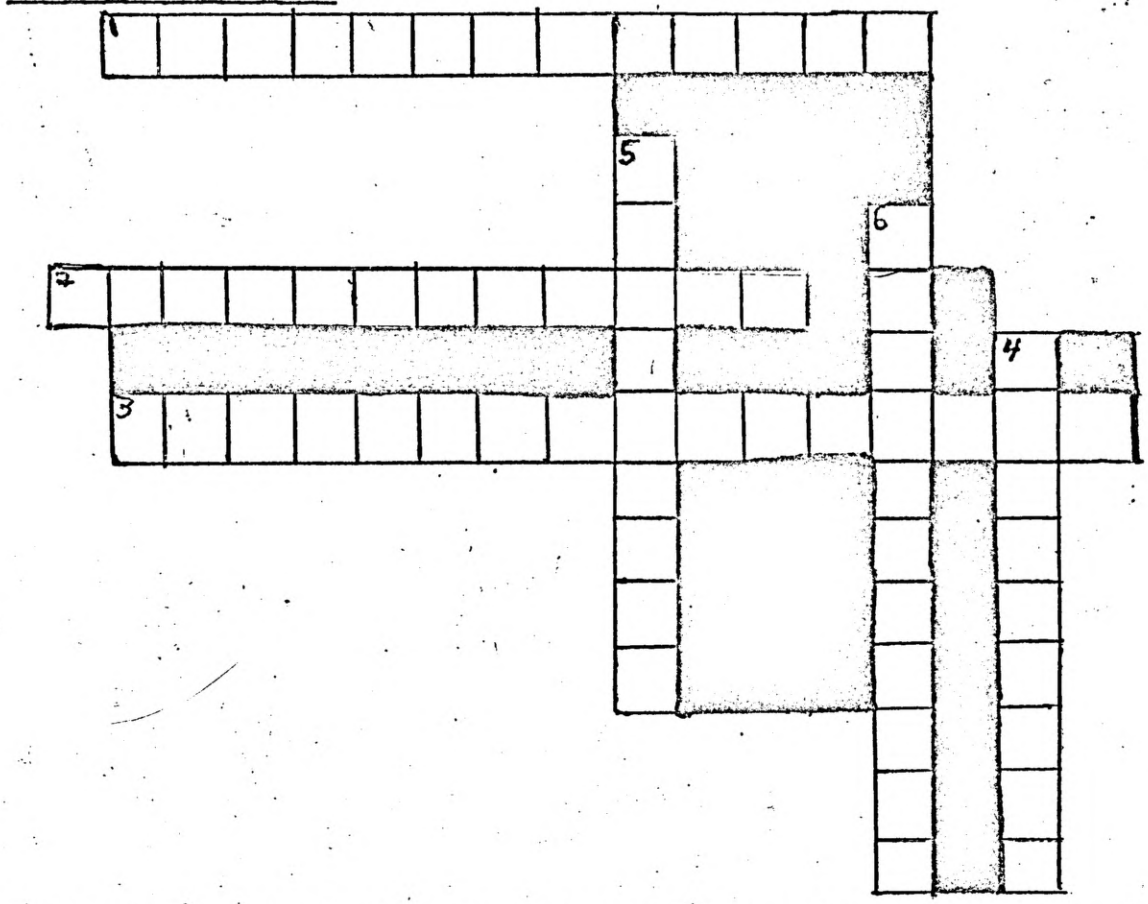
1- promoters — The people who begin and further the organization of the corporation. They induce others to subscribe to stock in the unformed corporation thus raising funds to incorporate and begin operations.

2- incorporators — Three or more people must apply to the Secretary of State in the state of incorporation for a charter to operate as a corporation. These people are known as incorporators.

3- board of directors	This is the corporations policy making body. It sets the main policies of the corporation and selects officers to carry out these policies.
4- corporation	The people selected by the board of directors to carry out its policies, i.e. the president, vice-president, secretary, treasurer, etc. These people are responsible for the day to day operation and management of the corporation.
5- stockholders	These are the actual owners of the corporation. The number of stock certificates or shares they hold indicate the extent of their ownership.
6- dividends	The profits that are divided among the stockholders when the board of directors thinks it advisable.

If you have studied these definitions so that you know and can apply them, go on to the practice exercise on page 126.

Practice Exercise:

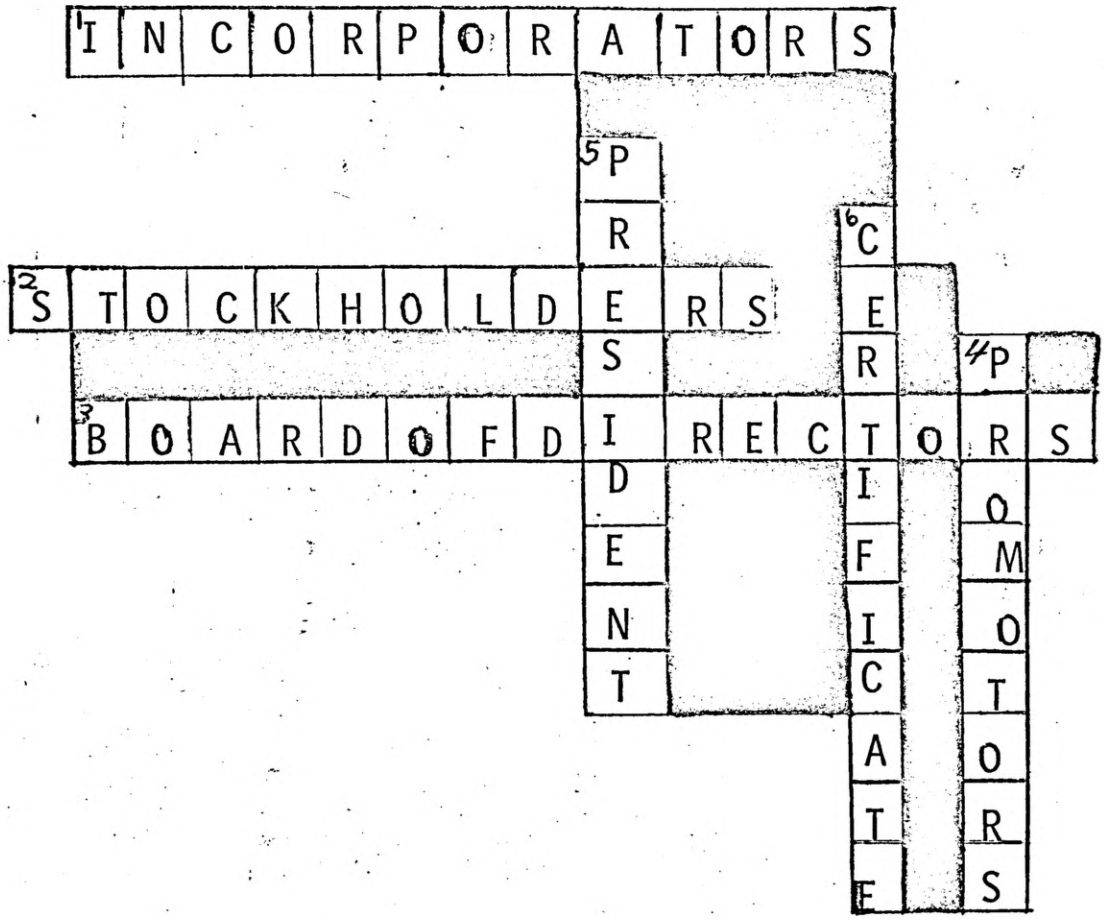


Fill in the missing words above by using the clues below.

1. The people who apply to the Secretary of State to charter the corporation.
2. The actual owners of the corporation.
3. The corporations policy making body.
4. The people who begin and further the organization of the corporation. They induce others to subscribe to stock in the unformed corporation, thus raising the funds to incorporate and begin operations.
5. The head officer of the corporation, appointed by the board of directors.
6. The stockholder is issued a stock_____. The number of these they hold indicate the extend of their ownership.

After you have completed this exercise go on to the next page and see how well you have done.

Key to the practice exercise for lesson five.



Well, how did you do?

If we agreed on all of the answers you are ready to go on to lesson VI. If there were any on which we did not agree go back and study that part of the lesson.

Lesson VI

The Nature of Corporations

The corporation is, to some, the most important form of business organization. There are more people employed by corporations than by any other type of business organization. Corporations also exceed all other types of businesses in total sales and in total profits. This is not because there are many corporations. Actually there are many more sole proprietorships than there are corporations. The reason is the size of the corporations, often very large. i.e. General Motors, Ford, DuPont, General Electric, General Foods, etc.

In order to operate as a corporation you must apply for and receive a charter from the state in which you wish to incorporate. These charters are usually issued by the Secretary of State. Three or more people, the incorporators, apply to the secretary for the charter. When the Articles of Incorporation, submitted with the application, are approved the charter is issued and the corporation comes into existence.

The corporation is created by law and has the same rights as a person. It can own property, enter into contracts, etc., just as a person can. It is actually an artificial person. The definition of a corporation most quoted today

is the one by Chief Justice Marshall in 1819:

> "A corporation is an artificial being, invisible, intangible, and exists only in contemplation of law. Being a creature of law, it possesses only those properties which the charter of its creation confers on it, either expressly of or incidental to its very existence."[3]

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[3]Dartmouth v. Woodward, 4 Wheaton (U.S.) 518 (1819).

Practice Exercise:

Choose the word or words in the left hand column that best fits the blanks in the sentences below. (some words may be used more than one time)

invisible
corporations
three
articles of incorporation
two
artificial
partnerships
sole proprietorships
law
four
charter
intangible

1. There are more _____ than any other type of business organization.
2. In order to become a corporation you must have a _____ from the state in which you want to incorporate.
3. There must be at least _____ incorporators.
4. The incorporators must submit to the Secretary of State an application and the corporation's_____.
5. _____employ more people, make more money and have greater sales than any other type of business organization.
6. A corporation is an _____ being, _____, and exists only in contemplation of _____. Being a mere

creation of _____, it possesses only those properties which the _____ of its creation confers on it, either expressly of or incidental to its very existence.

Now go on to the next page and check yourself.

Now let's find out how you did.

1. There are more sole proprietorships than any other type of business organization.

2. In order to become a corporation you must have a charter from the state in which you wish to incorporate.

3. There must be at least three incorporators.

4. The incorporators must submit to the Secretary of State an application and the corporation's Articles of Incorporation.

5. Corporations employ more people, make more money and have greater total sales than any other type of business organization.

6. A corporation is an artificial being, invisible, intangible, and exists only in contemplation of law. Being a mere creation of law, it possesses only those properties which the charter of its creation confers on it, either expressly of or incidental to its very existence.

Now score yourself with the scale below:

Rating Scale:

If you had all eleven responses correct-	Great. Send for your hat--you're one of the good guys.
If you correctly answered between 5-10-	Well, there's still hope for you. Go back and review the points you missed. Restudy the lesson until you have grasped all these points.
If you got less than 5 right-	Go back to sleep. Sorry I bothered you.

Lesson VII

The Articles of Incorporation

The creation of a corporation is much more complicated than the creation of a partnership or a sole proprietorship.

Once a corporation has been promoted and sufficient funds have been raised the incorporators apply to the Secretary of State for the charter. In applying the corporation must supply certain documents such as the Articles of Incorporation. The Articles of Incorporation should include:

1. the name of the corporation
2. its location
3. the purposes of the corporation
4. The amount and types of stock authorized
5. length of time for which the corporation is being formed if there is a definite period
6. names and addresses of the incorporators
7. names and addresses of officers and board members

In many states the incorporators must give public notice often through a newspaper advertisement of their

intention to incorporate. After all the requirements have been met, the fees paid and all materials have been examined and passed upon by the Secretary of State the charter will be issued and the corporation comes into existence.

Assignment:

Obtain a copy of some corporation's Articles of Incorporation. See if you can find all the items listed above. What other things did you find?

Lesson VIII

Corporate Stock

When a corporation comes into existence it usually issues stock certificates. These show the extent of the persons ownership in the corporation. According to the Model Business Act stock certificates must include:

1. the state of incorporation
2. the name of the person th whom it is issued
3. the number and class of shares represented and the designation of series, if any
4. the par value of each share or the statement that there is no par
5. if there is more than one class of shares, a summary of the rights and restrictions of each class[4]

Definitions

1. common stock — "Common stock is ordinary stock. Each share usually entitles the holder to one vote and one share of the profits in the form of dividends, when declared,

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[4]The American Bar Association Model Business Corporation Act, Sec. 21

and to participate in the distribution of capital upon dissolution of the corporation."[5]

2. preferred stock — This stock has some preference or priority over common stock. Dividends must be paid on preferred stock before they can be paid on common stock. Preferred stock usually does not carry a vote. Although the preferred stockholder must be paid first he is often not paid as much as the common stockholder. This is because the dividend on preferred stock is usually stated as a percentage of the par value. A share of 6% preferred stock with a par value of $100 would receive a dividend of $6 per share, should dividends be declared. If there was only enough money left to give the common stockholder $1 per share that is all he could get. On the other hand if there

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[5] Storrow v. Texas Consolidated Compress & Mfg. Assn., (C. C. A. 5th) 87 F. 612.

was enough money left to give the common stockholder $25 per share he would get that and the preferred stockholder would still only get $6.

3. cumulative preferred stock

There's just one catch to this seemingly sure thing that the preferred stockholder will receive dividends. Dividends must be declared by the board of directors before they can be distributed. Even if you own preferred stock that could receive a dividend unless it was declared you could not claim it. A company may also receive a smaller dividend that year and you therefore might not get as much as you expected. If your stock was cumulative preferred stock your dividends would accumulate over the years and you would have to be paid all back dividends before the common stockholder could receive any. This does not mean that you are assured of getting your dividends because the board

of directors could go on forever without declaring any. It does mean that you have a better chance of getting dividends than other stockholders though.

4. participating preferred stock — As discussed above when dividends are declared it is possible for the common stockholder to receive more in dividends than the preferred stockholder, unless the preferred stock is participating preferred stock. This means that they will in some way participate in other dividends after they have received their initial amount.

5. par value — When stock is issued it is usually given a par value. This is the price that is usually paid for the stock by the original subscribers. The par value is determined by the board of directors. Sometimes a board will issue no par stock.

6. book value — The book value of a share is its net worth in terms of the firms assets. We determine this by dividing the net assets of the corporation by the total number

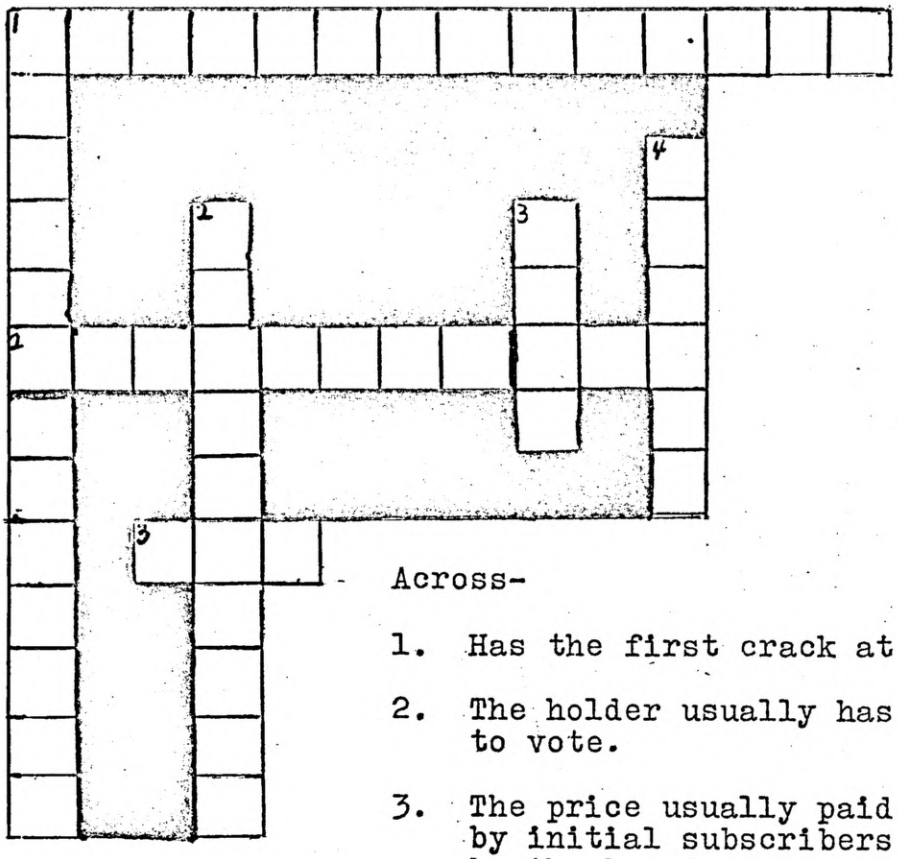
of shares outstanding. This tells you how much of the present net assets of the corporation you actually own.

7. market value — The current market price of the stock. The current quotation of the stock in the market on which it is listed. This may be above or below the book value depending on the future prospects of the company.

Time for another practice exercise. Turn the page and let's see how your doin'

Practice Exercise

Let's see if you're as good as you say you are. Fill in the missing words below.



Across-

1. Has the first crack at the dividends.
2. The holder usually has the right to vote.
3. The price usually paid for stock by initial subscribers that is set by the board of directors.

Down-

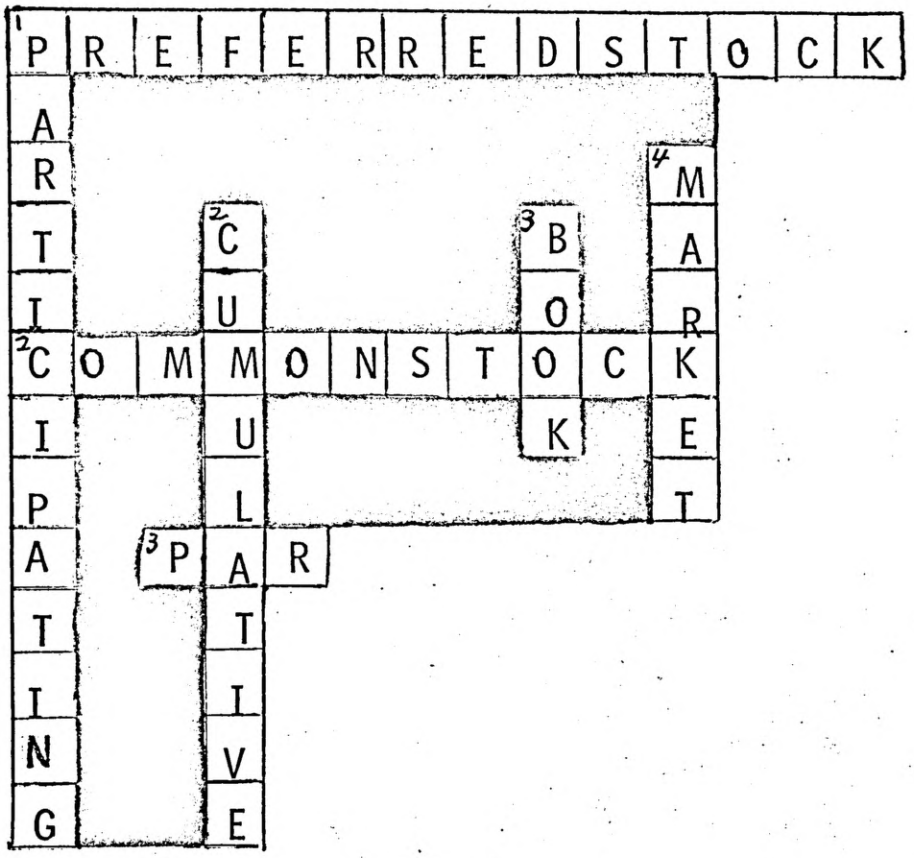
1. If you have this type of preferred stock your dividends may be higher than you expected.
2. If you have this type of preferred stock you have a better chance of receiving all of your dividends.

3. The net assets of the corporation divided by the total number of shares of stock outstanding.

4. The current selling price. What people are willing to pay.

The hour of truth has again arrived. Turn the page and find it.

Now it's time to check your answers.



Get 'em all right?

If you did, ask your boss for a raise.

If not, go back and check the areas you missed.

After you are satisfied that you have mastered the material in this lesson go on to the last lesson, lesson IX.

Lesson IX

The Stockholder

The stockholder is the owner of the corporation and as such has certain rights. All stockholders have the right to receive a certificate of ownership, the stock certificate.

The stockholder also has the right to transfer by sale or gift or sale any or all of his holdings in the company. He may sell the stock for as much or as little as he wishes.

If the stockholder holds voting stock he must be allowed to vote at the stockholders meetings. A stockholder usually has one vote for each voting share of stock, but can not vote a fractional share. i.e. a stockholder who holds $5\frac{1}{2}$ shares would get five votes. The stockholder may also designate another person to act for him as his proxy and cast his votes at the meeting.

Another right of the stockholder relates to the corporation offering for sale some newly issued stock. The stockholder here has the right to hold his relative percentage of ownership in the corporation. He must therefore be given the opportunity to purchase a percentage of the new issue equal to the percentage of his ownership in the corporation before the new offering. This must be done before

the new stock is offered to the general public. In other words, if you hold 100 shares in a corporation with 10,000 shares outstanding your percentage of ownership in the corporation is 1%. Should there be a new issue of 1000 shares of stock you would have the right to purchase 1% of the new offering or 10 shares before it was offered to the general public. This is known as the pre-emptive right.

As an owner in the corporation you have the right to inspect the books and equipment of the corporation. Modern courts have ruled that you must have a good reason for making this inspection. This modification came about because it would not be practical to allow any stockholder to examine your plant and books today. If you could do this at any time without a legitimate reason General Motors could buy one share of stock in Ford and inspect their new cars before they were on the market, they could also inspect their books and learn many closely guarded financial secrets.

As a stockholder you would have the right to receive any dividends that have been declared. In the event of dissolution of the corporation the stockholders are entitled to receive their share of the assets.

Practice Exercise:

Now, for a change of pace, try the following true-false test to measure your knowledge of this lesson.

T F 1. The stockholder is an owner of the corporation.

T F 2. The stockholder has the right to receive a stock certificate.

T F 3. All stockholders have the right to vote at the annual meeting.

T F 4. If a stockholder has $1\frac{1}{2}$ shares of stock he gets $1\frac{1}{2}$ votes.

T F 5. If a stockholder has 500 shares of stock he still gets only one vote, even though his stock is voting stock.

T F 6. The stockholder must cast his votes himself.

T F 7. The pre-emptive right means the company gives you more stock.

T F 8. As an owner in the corporation you have the right to inspect the books of the corporation.

T F 9. If the corporation is dissolved you loose all of your money.

Now turn to page 146 and see how well you have done.

Key to practice exercise from lesson nine.

1. True

2. True

3. False Only those stockholders holding voting stock may vote. Usually this means only the common stockholders and not the preferred stockholders.

4. False If the stock is not voting stock he gets no votes. If the stock was voting stock he would get only one vote because you can not vote a fractional share.

5. False Usually if you have voting stock you receive one vote for each share.

6. False The stockholder may assign his votes to a proxy.

7. False The pre-emptive right means that if you are a stockholder and the company issues some new stock you must have the right to purchase your proportionate share before it is offered for sale to the public.

8. True You must have a good reason though.

9. False You have the right to receive the proportionate share of your assets.

Well, how did you come out? If you didn't you had better go back and be sure you go over the points that are still bothering you.

If you feel that you have mastered all of the material in this unipac go on to the post test on the next page.

Lesson X

Post-Test

It's time to see how well you have done in developing a understanding of the preceding lessons.

THE COMMITTEE TO IDENTIFY UNIDENTIFIED BUSINESS ORGANIZATIONS asks you the following questions.

A. Read the following definitions carefully. Then place the letter that appears to the right of the definition next to the appropriate word at the bottom of this page.

a. It is owned and operated by one person, sometimes with a few additional employees.

b. An association of two or more persons to carry on a business for a profit.

c. The set of rules or agreement that govern b.

d. An association of two or more people to carry on a business for a profit in which one or more of the associates has limited liability.

e. The partner that can be held liable for all debts of the firm.

f. The partner with limited liability.

g. The people who begin and further the organization of the corporation. They are usually involved in inducing others to subscribe to stock in the unformed corporation.

h. The three or more people who must apply to the state for a charter to operate the corporation.

____1. partnership ____2. limited partner ____3. promotors

____4. incorporators ____5. articles of copartnership

____6. sole proprietorship ____7. limited partner

____8. general partner

i. the corporations policy making body

j. the people chosen by the board of directors to be responsible for day to day operations and carrying out of board policy

k. the actual owners of the corporation

l. the profit divided among the stockholders when declared by the board.

m. an artificial being, invisible, intangible, that exists only in contemplation of law

n. ordinary stock, usually carries a vote

o. first to get dividends

p. can accumulate dividends that have not been declared in previous years

q. can get dividends above the percentage stated on the stock certificate.

r. the original selling price set by the board.

s. the assets of the corporation (net) divided by the total number of shares of stock.

t. the current selling price of a share of stock.

____9. cumulative preferred stock ____10. board of directors ____11. participating preferred stock ____12. corporation officers ____13. market value ____14. dividends ____15. corporation ____16. book value ____17. common stock ____18. stockholders ____19. preferred stock ____20. par value

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B. This section concerns situations that might occur in various types of business organizations. Choose from the alternatives given, the best answer to fit the situation. Indicate your choice by circling it.

1. Lindsay is a partner in a limited partnership. His name is not included in the firm name. He invested $5000 in the firm and agreed to work on a part time basis to keep the books and help in making any important management decisions. Lindsay is a) general partner, b) a limited partner, c) not a partner at all.

2. Penn, Sands and Harris agree to organize a corporation to be owned by the three of them, but they do not obtain a state charter. This is a a) sole proprietorship, b) limited partnership, c) partnership, d) corporation.
3. Bordon receives a $7 dividend on his $100 par value common stock in the Brennen Manufacturing Company. Is it possible for Crawford to receive more than a 7% dividend on his preferred stock which also has a $100 par value? a) yes, b) no, c) not enough information.
4. Halverson had 42½ shares of stock in Prairie Oil. How many votes was he entitled to if this was voting stock? a) 42½, b) 1, c) 42.
5. A stockholder desired in good faith and with proper motives to examine the corporations records. Was he entitled to do so? a) yes, b) no.
6. Mr. Jones opened up a drug store. He operates it with the help of his son and one other employee. This is a a) corporation, b) partnership, c) limited partnership, d) sole proprietorship.
7. Larson and Hanson decide to form a partnership. Because of limited funds they wish to find an investor who will put up an additional $13,000 needed to begin operations.

Carlson agrees but expresses concern about getting into a position where he would be subject to unlimited liability. Finally it is agreed that Carlson will be taken in as a limited partner and have no responsibilities at all in the firms operation. The partnership was formed and named Larson and Hanson, Ltd. Due to an oversight there was no written copy made of the agreement. Carlson was a) a general partner, b) a limited partner.

C. True-False

T F 1. The sole proprietor has unlimited liability.

T F 2. The general partner publicly and actively engages in the activities of the firm.

T F 3. A partnership is the most common type of business.

T F 4. A partnership must be organized for profit.

T F 5. The officers determine the main policies of the corporation.

T F 6. Some shares of stock in the corporation are voting shares.

T F 7. Property of the corporation is owned by the stockholders.

T F 8. Preferred stock has some priority or preference over other stock.

T F 9. Dividends are profits distributed to stockholders.

T F 10. Preferred stock is ordinary voting stock.

T F 11. A stockholder may have a proxy cast his votes at the annual meeting.

T F 12. The officers hire the board of directors.

After you have completed this test to the best of your ability turn to page 153 for the answers.

Check your answers to the post test carefully with those given below. If there are any you missed be sure to check them before going on to the next lesson.

Part A

1-b	4-h	7-d	10-i	13-t	16-s	19-o
2-f	5-c	8-c	11-q	14-l	17-n	20-r
3-g	6-a	9-p	12-j	15-m	18-k	

Part B

1-a 2-c 3-4 4-c 5-a 6-d 7-a 8-a

Part C

1-t 2-t 3-f 4-t 5-f 6-t 7-t 8-t 9-t 10-f 11-t 12-f

Now check yourself against the scale below.

all right	GREAT!! Go on to lesson 10
38-39 correct	Excellent, Look over the points you missed and then go on to lesson 10, if time permits.
36-37 right	Very good. Go over the points you missed and then go on to lesson 10 after you are sure you have grasped them.
34-35 right	Good. You're a good man Charlie Brown but you could be a better one if you went back and learned the points you missed. After you learn them if time permits, do lesson 10.
32-33 correct	Fair. Redo the lessons from which you missed questions. Then take the post test over.
less than 32 correct	Go back to the pre-test. Do not pass go. Do not collect $200. Pick yourself up. Dust yourself off and start all over again.

Lesson X

Quest

Now that you have finished this unipac and have mastered the basics of these business organizations, here are some activities that might lead you onward. Go-Team-Go!!

1. Survey the businesses in your community and find one that falls into each of the organizational forms discussed in the unipac. See if you can decide why each of these businesses chose their particular organizational form.
2. List your reasons on a sheet of paper.
3. After you have done number one and two, interview the owners of the businesses on your list and ask them why they chose the particular organizational form. How do their reasons compare with yours?

Lesson XI

Post-Evaluation

Now that you have completed the unipac it is yours to keep and use for future reference. Please answer the questions below and turn this sheet into your teacher. Please feel free to make any comments you wish. It is not necessary to put your name on this sheet.

1. Were the directions and diagrams clear?

2. Was the material in the lessons understandable?

3. How many times did you consult the teacher?

4. How many times did you consult other students?

5. In which lessons did you need help?

6. How much time did you take to complete this unipac?

_____hours and _____minutes

7. Did you enjoy doing this unit? Explain.

BUSINESS ORGANIZATION

True-False

T F 1. There are more corporations than any other type of business organization.
T F 2. The partnership is the most simple type of business organization.
T F 3. The sole proprietor takes full responsibility for all debts of the firm.
T F 4. An association of two or more persons to carry on a business for profit is a partnership.
T F 5. The partnership is governed by the Articles of Incorporation.
T F 6. A partnership need not be organized for profit.
T F 7. The limited partner is not responsible for the debts of the firm beyond his original investment.
T F 8. The partnership agreement for a limited partnership need not be in writing.
T F 9. The manager of the partnership may be a limited partner.
T F 10. The stockholder is an owner of the corporation.
T F 11. The stockholder can not give away his stock.
T F 12. A stockholder having $5\frac{1}{2}$ shares of common stock would probably have $5\frac{1}{2}$ votes to cast at the annual stockholders meeting.
T F 13. The stockholder has the right to be issued a stock certificate.
T F 14. Anyone can start a corporation all that is needed is the money and a place in which to conduct business.
T F 15. The common stockholder is the first to get dividends in most instances.

Matching - Place the letter of the statement next to the words below that it best matches. Only make six matches.

a. The people who begin and further the organization of the corporation. They induce others to subscribe to stock in the unformed corporation.
b. Three or more of these must apply to the Secretary of State for a charter.
c. The corporations policy making body.

d. The partner who is only liable to the extent of his original investment.
e. Profits that are divided among the stockholders.
f. The total net assets of the corporation divided by the number of shares outstanding.

_____1. Dividends
_____2. Board of Directors
_____3. Market Value
_____4. Common Stock
_____5. Par Value
_____6. Book Value
_____7. Limited Partner
_____8. Promotors
_____9. Incorporators
_____10. Participating Cumulative Preferred Stock

Cases-Circle the correct answer.

1. Mallett and Lowe decide to open up a business. They form a partnership with no written agreement. Later when they begin to run short of funds they get Byre to contribute $5000 to the organization and tell him that he will be a limited partner. Three days later, when the firm became insolvent, the creditors began to attempt their accounts. After finding that Lowe and Mallett are broke they go to Byre. Does Byre become responsible for the debts of the firm? Yes No

2. Jones owns $7\frac{1}{2}$ shares of stock in the XYZ Corporation. How many votes does he get at the stockholders meeting? 1, 7, $7\frac{1}{2}$

3. Franklin, Petrey and Smith organize a corporation for the purpose of selling automobiles. They fail to obtain a charter from the state. This is a corporation, partnership sole proprietorship

4. A stockholder of General Motors in good faith and with proper motives travels to the main office in Flint, Mich. and demands to examine the corporations books. Can he do this? yes no