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## ABSTRACT

A project was conducted to develop a valid, competency-referenced test on the core competencies identified for the Missouri Fundamentals of Marketing curriculum. During the project: (l) multiple-cholce test items based on the core competencies in the Fundamentals of Marketing curriculum were developed; (2) instructions for onsite administration of the test were written; (3) a field test was conducted; (4) the test was given statewide; and (5) analyses were performed on the data obtaıned. Evaluation showed that the test instrument adequately assess. students' mastery of the core competencies within tne Fundamentals of Marketing curriculum and that a majority of the test items developed for the tes have statistical adequacy. The final product of the project $1 s$ a l2l-item test that correlates to the Fundamentals of Marketing core competencies. Recommendations were made for all marketing education programs in the state to participate in the testing and for a test bank of questions to be developed. (Appendixes include the test, project correspondence, results from participating schools, and certıfıcates of achıevement and participation.) (KC)

[^0]FINAL REPORT

June 30, 1990

Missouri Department of Elementary and Secondary Education
Division of Voncational and Adult Education
Vocational flaninng and Evaluation
Jefferson City, Missouri 65102
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## FINAL REPORT

# development of a state-wide competency test for marketing education 

Project Number: $\quad$ 90-133-110-8<br>Clifton L. Smith<br>Project Director<br>Marketing Education<br>University of Missouri-Columbia<br>Columbia, MO 65211<br>June 30, 1990<br>Missouri Department of Elementary and Secondary Education Division of Vocational and Adult Education Vocational Planning and Evaluation Jefferson City, Missouri 65102

[^2]
#### Abstract

TITLE: Development of a State-Wide Competency Test for Markeling Education FRINGIPAL INVESTIGATOR: Clifton L. Smilh Univerilly of Missourı-Columbia


PROJECT GOAL: To develop, administer, and repert the findings of a competency test, based on the identified competencies in the Fundamentals of Marketing curriculum.

OBJECTIVES: (1) To develop a competency-referenced test on the core competencies identified for the Fundamentals of Marketing curriculum. (2) To develop procedures that ensure that the test items developed have a high degree of validity and reliability. (3) To develop procedures for a field test of the instrument. (4) To develop procedures for the on-site administration of the test. (5) To conduct a state-wide administration of the test. (6) To develop procedures for the tabulation and reporting of results.

PROCEDURES: To implement the project design, the following activities were conducted: (1) Development of multiple choice test items based on the core competencies, in the Fundamentals of Marketing curriculum; (2) Development of instructions for the on-site administration of the test; (3) Conduct of a field test of competency test items and instructions for the administration of the test; (4) Conduct of the test on a state-wide basis; (5) Analysis and tabulation of the data converning mastery of competencies by students completing the Fundamentals of Marketing course.

RESULTS AND FINDINGS: The specific results and findings from this project was that the test instrument developed adequately assess sludents' mastery of the core competencies within the Fundamentals of Marketing curriculum and that a majority of the test items developed for this test have statistically adequate.

FINAL PRODUCT: The final product from this project is a 121 tem test which correlates to the Fundamentals of Marketing core competencies.

RECOMMENDATION FOR FURTHER ACTION: Each marketing education program in Missouri should be encouraged to participate in the Fundamentals of Marketing state-wide test. The information gleamed from each program's participation could be used as an aid in program evaluation, curriculum improvement, and instruction. In addition, test item development should be continued and that a test bank of questions be developed that correspond to the core competencies within the Fundamentals of Marketing curriculum.

## INTRODUCTION

The Marketing and Cooperative Education section of the Division of Vocational and Adult Education, as part of the Vocational Instructional Management System (VIMS), had identified and implemented in local secondary programs of marketing a minimum core competency curriculum for the Fundamentals of Marketing course. In order to evaluate the core competency curriculum on a state-wide basis, and to implement the competency referenced testing provision as oullined in the Excellence in Education Act, a valid competency-referenced test, that was both valid and reliable, needed to be developed. In addition, a systematic approach to the administration of the state-wide test also needed to be developed and field tested.

## Statement of the problem

The goal of this project was to develop a competency-referenced test, that was both valid and reliable, for tise Fundamentals of Marketing course and to administer this test on a statewide basis and to provide data on the results of the test to the approptiate personnel.

## OBJECTIVES AND FINDINGS

The specific objectives and findings of the project were:
Objective Number One: To develop a competency-referenced test on the core competencies identified for the Fundamentals of Marketing curriculum.

Findings: Based on the core curriculum for Fundamentals of Marketing, one multiple choice test tem was developed for each competency within the curriculum. Test items were grouped under the "duty bands" listed for the core curriculum. In the development of test items, competencies were noted that had a higher level (ranging from basic knowledge to comprehension, application, analysis, synthesis, and evaluation) and test items were developed that reflected that level.

The "final" test developed consisted of 121 test items subdivided into the following categories:
Communications in Marketing
Economic Concepts
Employment and Advancement
Human Relations in Marketing
Marketing Operations
Market Planning
Advertising \& Sales Promotion
Selling
Marketing Concepts

Total

| 6 test items | $06.6 \%$ of |
| ---: | :--- |
| 22 test items | $18.2 \%$ of |
| 14 test items | $11.6 \%$ of |
| 9 test items | $07.4 \%$ of |
| 19 test items | $15.7 \%$ of |
| 10 test items | $08.3 \%$ of |
| 12 test items | $09.9 \%$ of |
| 15 test items | $12.4 \%$ o |
| 12 test items | $09.9 \%$ o |
| 121 |  |
| $100.0 \%$ |  |

Refer to Appendix A for a copy of the final test instrument developed for this project.

Objective Number Two: To develop procedures that ensure that the test items developed have a high degree of validity and reliability.

Findings: In a ineasurement context, validity refers to the degree to which a test or instrument is useful in measuring that which it was designed to measure. Content validity is concerned with analyzing the subject content of the test. This approach is concerned primarily with the question, "Does this test provide an accurate and comprehensive measure of the kncwledges, skills, and understandings to be learned or developed in the Fundamentals of Marketing course?"

Based on the core competencies for the Fundamentals of Marketing, a table of specifications was utilized (refer to objective number one findings). Each competency was listed in the table of specifications by its relaied content area or "duty band." The relative emphasis that the content area was given in the development of the total test was correlated to the number of competencies within each related content area.

In a measurement context, reliability refers to the degree to which a particular test or instrument provides trusiworthy or consistent measures of what it does measure. The procedure utilized for the state-wide Fundamentals of Marketing test was the Kuder-Richardson method. This formula is based upon the proportion of persons scoring correcily on each item and the standard deviation of the distribution of test scores. Based on data from this test, the reliability (as determined by the KR-20) was 0.937 and on the KR- 21 the rellability was
0.929. The standard error of measurement provides an estimate of the probable margin of error in obtained test scores. Based on test results, the standard error of measurement for the state-wide Fundamentals of Marketing test was 4.90 . Thus, for about 95 percent of the students participating in this test, obtained scores are no greater than 5 (plus or minus) points away from their true score.

In addition, each ligSt item was analyzed according to the matrix of responses by fifths based on the statistics incicated in the following table:

| Quintile | Sample Size | Proportion | Score Range |
| :---: | :---: | :---: | :---: |
| 1st | 363 | .20 | $85-111$ |
| 2nd | 359 | .20 | $74-84$ |
| 3rd | 372 | .20 | $62 \cdot 73$ |
| 4th | 354 | .19 | $49-61$ |
| 5th | 379 | .21 | $8 \cdot 48$ |

In reviewing statistical item analysis, approximately ten questions should be revised and that distractors or foils on several questions should be reviewed on an individual basis.

Objective Number Three: To develop procedures for the on-site administration of the lest on a state-wide basis.

Findings: A detailed instruction sheet for the administration of the slate-wide test for the Fundamentals of Marketing test was developed (see Appendix B for a copy of the instruction sheet). Based on input from on-site aciministrators of the test who were amono the first to utilize the test, the total time required 10 administer the test was two class periods. Based on this input, those administrating the test were asked to have students complete the basic information and "bubbling" component of the optical scan sheet prior to the actual test taking time. The "average" student was able to complete the test itself in one fifty-five minute class period.

Objective Number Four: To conduct a state-wide administration of the test.

Findings: Utilizing the Marketing and Cooperative Education section's listing of programs, each program identified as Marketing Education was sent a letter (see Appendix C for a copy of the letter) in January, 1990 requesting their participation in this testing project. A telephone follow-up of schools who had not responded by January 31, 1990 was conducted to

- $\quad$ solicit their participation in the test. A total of 69 Marketing Education programs indicated their willingness to participate in the state-wide testing project. Each school was asked to indicate their preferred testing date. Approximately one week prior to the tesiling date, instructions, copies of the test, optical scan sheets, and a return envelope was mailed to the test site administrator. Of the 69 programs receiving materials to conduct the test, 56 schools returned completed test materials. Two schools returned the test materials after the June 15, 1990 cut-off date and were not included in the final analysis. Refer to Appendix $D$ for a listing of participaling schools and mean average for each school.

Objective Number Five: To develop procedures for the tabulation and reporting of results from the state-wide test to the appropriate personnel.

Findings: Upon receiving test material from the local marketing education program, optical scan sheets were reviewed for completion of all required information. Optical scan sheets were then scored utilizing the Center for Educational Assessment. Upon scoring of the optical scan sheets, a report for each school was printed that provided a sludent's individual score and measures of central tendency for the total participants from each schooi. This data was then entered into the total data bank for this project.

Upon reviewing each student's test score, a cerlificate of achievement was provided for students who scored 70 percent or better on the slate-wide test. Students achieving 90 percent or better received a Gold Level Award; 80 percent or better received a Silver Level Award; and those achieving 70 percent or better received a Bronze Level Award. Certificates and a report indicating each student's score was mailed to the Markeling Educator at the participating schools for distribution. In addition, a Certificate of Participation was mailed to the local school official indicating that the local marketing education program had participated in the slate testing project. See Appendix $E$ for a copy of each certificate level and certificate of participation.

Total test data for all schools was processed as well as test item analysis for each question on the state-wide test for the Fundamentals of Marketing competencies. A summary of test statistics is as follows:

| Mean Score | 66.07 |
| :--- | :--- |
| Median Score | 67.04 |
| Number of Scores | 1.827 |

## POPULATION

The target population for this study were students enrolled in a Fundamentals of Marketing course in Missouri during the 1989-1990 school year. A total of 1,827 students participated in the state-wide test of the Fundamentals of Marketing core curriculum.

## CONCLUSIONS AND RECOMMENDATIONS

Conclusion Number One: The test instrument developed adequately assess students' mastery of the core competencies within the Fundamentals of Marketing.

Recommendation: Based on the results of the administration of this test, each marketing education program in Missouri should participate in the testing of the core competencies in the Fundamentals of Marketing curriculum. The individual program information obtained can assure that the "right" students are receiving the "right" instruction from the "right" teachers. Additional information that can be gleamed from the test information can be used as an aid in program evaluation, curriculum improvement, and instruction.

Conclusion Number Two: A majority of the test items developed for this test have proven statistically adequate. In addition, the test item difficulty index and the discrimination index indicate that the total test has a direct measure of student mastery.

Recommendation: Those test items in which test item analysis indicated a structural defect should be rewritten and included within the test instrument.

Conclusion Number Three: As core competencies for the Fundamentals of Marketing are "revised" or "revalidated" that test items should correspond to those competencies that are added and test items removed from the test instrument for those competencies that are realigned.

Recommendation: Test item development should be continued and that a test bank of questions be developed that correspond to the core competencies within the Fundamentals of Marketing curriculum.

## ATTACHEMENTS

## Procedures

References

Selected Bibliography

Instrument

Glossary

## PROCEDURES

To implement the project design and to altain the objectives set forth, the following activities were conducted:

1. The core curriculum for Fundamentals of Marketing were reviewed. It was determined that one multiple-choice test question would be developed for core competency. Test questions consisted of a stimulus statement followed by a list of four or five possible responses or alternatives. The following parameters were utilized in the test item development:
a. Items were based on relevant information. A table of specifications was developed which outlined the core competencies as well as the level of learning al which they should be tested.
b. Item stems were formulated using simple and concise language.
c. Alternatives were developed that were plausible and unambiguous.
d. Allowances for review and revisions of all items. Members of the markeling education curriculum team reviewed each test item for relevaincy and correctness.
2. Upon completion of the test items, instructions for the test were developed and the test items entered onto a testing format that corresponded with optical scanning procedures for scoring of the test.
3. A field test of the instrument was conducted with the Advanced Marketing classes of the two high schools in Columbia. The field test was utilized to ensure that the test did not contain any "trick" questions; the test was easy to take and score; that the directions were clear and concise; and if each test item was valid and reliable. Test item analysis was conducted and those items in which discrepancies occurred were reworded or rewritten.
a. The final test instrument, with instructions were printed and prepared for distribution to test sites.
4. Ulilizing the Marketing and Cooperative Education section's listing of programs, each program identified as Marketing Education was sent a letter in January, 1990 requesting their participation in this testing project. A telephone follow-up of schools who had not responded by January 31, 1990 was conducted to solicit their participation in the test. A total of 69 Marketing Education programs indicated their willingness to participate in ite state-wide testing project.
5. Each school agreeing to participate in the state-wide test was asked to indicate their preferred testing date. Approximately one week prior to the testing date, instructions, copies of the test, optical scan sheets, and a return envelope was mailed to the test site administrator. Of the 69 programs receiving materials to conduct the test, 56 schools returned completed test materials.
6. Upon receiving test material from the local marketing education program, optical scan sheets were reviewed for completion of all required information. Optical scan sheets were then scored utilizing the Center for Educational Assessment. Upon scoring of the optical scan sheets, a report for each school was printed that provided a student's individual score and measures of central tendency for the total participants from each school. This data was then entered into the total data bank for this project.
7. Upon reviewing each student's test score, a certificate of achievement was provided for students who scored 70 percent or better on the statewide test. Students achieving 90 percent or better received a Gold Level Award; 80 percent or better received a Silver Level Award; and those achieving 70 percent or better received a Bronze Level Award. Certificates and a report indicating each student's score was mailed to the Marketing Educator ar the participating schools for distribution. In addition, a Certificate of Faricipation was mailed to the local shool official indicating that the local marketing education program had participated in the state testing project.

## REFERENCES

Specific references utilized in this study included textbooks and materials as referenced in the competency cross-listing for the Fundamentals of Marketing course.

## SELECTED BIBLIOGRAPHY

No specific bibliography was utilized in the development of this project.

## INSTRUMENT

The Fundamentals of Marketing lest utilized in this project is referenced in Appendix $A$ of this report.

## GLOSSARY

No specific glossary was utilized in this project.

## APPENDIXA

FUNDAMENTALS OF MARKETING
TEST INSTRUMENT

## COMMUNICATIONS IN MARKETING

1. Whith of the elements below are most imrortant in business communication?
A. Clarity, accuracy
B. Brief, clarity
C. Accuracy, colorful
D. Colorful, brief
2. Which of the following best describes listening with empathy?
A. Repeating what the speaker has said.
B. Keeping good eye contact and nodding.
C. Listening actively and then asking questions.
D. Listening to what is being discussed from the speaker's point.
3. Answering the phone promptly creates an impression of:
A. efficiency.
B. confidence.
C. welcoming the caller.
D. all of the above
4. Body and facial movement may communicate a great deal about:
A. feelings.
B. enotions.
C. reactions.
D. all of the above
5. The goals of $\qquad$ are to understand and retain nearly all that has been read.
A. Skimming
B. Scaming
C. Interre reading
D. Selective reading
6. A letter that is exchanged by employees within the same company is referred to as a:
A. resume.
7. menorendum.
C. purchase order.
D. None of these answers are correct
8. How are trade journals used by retail businesses?
A. To provide a good advertising medium
B. To appeal to the general public
C. As training guides for entry-level workers
D. To learil of new industry developments
9. Encoding, transmitting, and decoding are part of the:
A. feedback process.
B. communication process.
C. creative process.
D. parailel systems process.

## ECONOMIC CONCEPTS

9. Economic goods are:
A. the products and services offered to meet consumer needs and wants.
B. products thet are sold to be used without further processing.
C. goods that are used in producing other goods.
D. all natural resources that are available.
E. All of the above
10. The study of how scarce resources are organized and used to satisfy unlimited human wants is called
$\qquad$ -
A. Capitalism
B. Marketing
C. Economics
D. Ecology
11. When business operations and precedures become more efficient and economical:
A. monopolies are created to give certain businesses a greater share of the market.
12. consumer prices are raised in order to increase profits.
C. more machines are needed to produce finished products.
D. consumers are able to buy better procucts at lower prices.
13. Economics deal with the way in which consumer $\qquad$ are satisfied or fulfilled.
A. needs
14. wants
C. profits
D. Both $A$ and $B$
15. Which of the following are major types of economic resources?
A. Land, planes, money
16. Capital, money, trucks
C. Labor, land, capiral
D. Money, labor, tools
17. Labor is a major type of economic resource which includes:
A. Iand and water.
B. hours and wages.
C. equipment and tools.
D. workers and menagers.
18. The climate of modified free-enterprise system gives people:
A. sure way cf success.
B. the right to open their own business.
C. the safety of government ownership.
D. All of the above
19. Which of the following is business organization owned and operated by its users?
A. Cooperative
B. Partnership
C. Corporation
D. Sole proprietorship
20. Which of the following is a fundamental difference between communism anc socialism?
A. In socialistic economy, a large percentage of the people work for the governnent; this is not true in communism.
B. Commists believe in total control of the means of production and distribution; socialists do betieve in some private ownership of the means of production.
C. In a commistic economy, profit is the main goal of a business or industry; this is not true in a socialistic economy.
D. Taxes in commnistic societies are considerably higher than in socialistic societies.
E. Labor strikes occur frequently in communistic societies; they are not permitted in those that are socialistic.
21. The true profit of a business is referred to as:
A. net profit.
B. gross profit.
C. operating expenses.
D. cost of merchandise.
22. Monies that businesses must pay out in order to operate are called:
A. income.
B. expenses.
C. profit.
D. loss.
23. Without the $\qquad$ , many people would not risk starting a business.
A. sales motive
B. profit motive
C. customer pressure
D. business flair
24. The quantity of a product offered on the market at a specific price is called:
A. demend.
25. supply.
C. break-even point.
D. price.
26. When demend is greater than supply, higher prices can be charged because consumers are willing to pay more to obtain the product. This is known as a:
A. buyer's market.
B. product utility.
C. Iuxury product.
D. seller's market.
27. An increase in price will usually cause the supply of a product to:
A. remain the same.
B. decrease.
C. increase.
D. None of the above
28. "Market price" can best be defined as:
A. the amount of satisfaction a product provides a consumer.
B. the monies the seller must spend in order to make a product.
C. the amount for which an item sells in the competitive market place.
D. the price at which customers will buy the same amount that producers will buy.
29. One of the strongest influences on products and product plaming is:
A. service.
B. color.
C. competition.
D. price.
30. Competition in a private free enterprise system is important because:
A. it forces business to constantly improve their goods and services.
B. without it, business could offer you a minimm of services.
C. it is a check and balance system.
D. All of the above
31. The total value of the production of goods and services in the nation over a specified period (usually one year) is:
A. gross net product.
B. gross national production.
C. gross national product.
D. growing net product.
32. Which of the following components is used in the calculation of the gross national product?
A. Imports
B. Government purchases
C. Business investments
D. All of these answers are correct.
33. The U.S. GNP has continued to grow because of $\qquad$ that efrcourage the entrepreneurs to invest capital into the system.
A. government laws
B. profit notives
C. social motives
D. trade deficits
34. When business records indicate that merchandise stock is less than the actual merchandise count, the business is experiencing a ( $n$ ):
A. short supply.
B. poor record keeping.
C. inventory shrinkage.
D. stock shortage.

## Employment and advancement

31. Success in marketing requires $\qquad$ , skills, and the right personal attitudes.
A. knowledge
B. pride
C. connections
D. training
32. Which of the following is an entry-level marketing position found in the marketing industry?
A. salesperson in a department store
B. cashier-clerk at a grocery store
C. front-desk clerk at a hotel
D. all of the above
33. Many companies will try to place present employces in positions of responsibility rather than hiring from the outside. This is commonly referred to as:
A. succession planning.
B. promotion from within.
C. affirmotive action.
D. power of seniority.
34. Along with analyzing your interests and abilities, you must also $\qquad$ When preparing for a career in marketing.
A. recognize the required competencies
B. explore career opportunities
C. market your interests and abilities
D. all of the above
35. The best way to develop self-confidence toward participating in an intarview is to:
A. be prepered.
B. get there early.
C. wear something comfortable.
D. talk to the secretary.
36. When dressing for the job it is best to:
A. dress like your co-workers.
B. dress for the job you want.
C. dress for the job you have.
D. wear what you are comfortable wearing.
37. The $\qquad$ should provide complete details about your education and experience.
A. cover letter
38. letter of application
C. resume
D. Letter of inquiry
39. Most application forms ask you to state the salary you expect, you should:
A. write down the largest amount you can get away with.
B. write usual rate.
C. write what you think is fair.
D. All except $A$
40. Employment tests that deal with manual dexterity attempt to measure:
A. the ability to use one's hands skillfully.
B. the ability to reason well.
C. the ability to get along with others.
D. the ability to work with numbers.
41. If a personsl interview ends with the applicant getting the job, the applicant should:
A. ask where and when to report to work.
42. thank the interviewer.
C. write a thank you note to the interviewer.
D. All of the above are correct.
43. Enforcement of store policies results in:
A. Less confusion and disagreement among employees.
B. disloyalty to the employer.
C. decreased job satisfaction.
D. all of the above

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42. The ability to think and act while on the job without being urged is known as:
A. initiative.
43. industry.
C. attitude.
D. none of the above
44. $\qquad$ is obtained by subtracting an employee's total deductions from total earnings.
A. Gross pay
B. Net pey
C. Monthly pay
D. Bonus pay
45. Your "package of services" can be described as:
A. your interests and activities.
B. the benefits you can offer on employer.
C. the resume and letter of application.
D. the way you present yourself in an interview.

## human relations in marketing

45. Human relations is defined as:
A. the science of humen behovior.
B. the art of getting along with others.
C. the art of listening to others.
D. the science of human development.
46. There are four fundamental areas to human relations. Which of the following is generally not considered one such area?
A. understanding oneself
B. understanding others
C. getting people to change
D. listening and commuicating
E. diagnosing and resolving conflicts
47. The first step in self-understanding, in order to change your personality so as to improve your human relation skills, is:
A. find out how your personality rates.
B. decide that your personality can be improved.
C. develop eplan of action.
D. you cannot change personality.
48. Anslyzing one's personal interests, aptitudes, traits, abilities and attitudes is a way to increase:
A. prestige.
B. achievement motivation.
C. self-understanding.
D. intelligence.
49. A personal ability, capacity or talent is called an $\qquad$ .
A. aptitude
B. attitude
C. emotion
D. interest
50. A person must experience series of successes to develop a feeling of:
A. professionalism.
51. self-confidence.
C. prestige.
D. meturity.
52. Your own evaluation of your personality is called:
A. self-understanding.
53. self-obeervation.
C. self-appraisal.
D. internal appraisal.
54. Writing your goals down forces you to $\qquad$ them.
A. measure
B. remember
C. chenge
D. clarify
55. Adjusting to individual personalities and developing good relations with co-workers and supervisors in order to accomplish goals is called:
A. humen developrent.
B. discrimination.
C. teem-building.
D. ethnic adjustment.

## MARKETING OPERATIONS

54. Your retail inventory on March 1 , is $57,157.32$; you had $\$ 652.20$ in markdowns during the month. inat is your retail inventory at the end of the month?
A. S6,505.12
55. $56,505.52$
C. $57,809.52$
D. $57,908.12$
56. What is the minimum monthly payment on merchandise purchased on a 12 -month contract when the beginning balance of the account is $\$ 849.85$ ?
A. $\$ 68.02$
B. $\$ 70.82$
C. $\$ 78.02$
D. $\$ 60.82$
57. The retail value of the planned purchases for April is $\$ 7,600$ and the planned initial markup on the purchases is 40 percent. What is the figure for the planned purchases at COST?
A. $\$ 3,040.00$
B. 8304.00
C. $\$ 4,560.00$
D. 8456.00
58. Which of the following is considered to be a psychologically appegling price?
A. $\$ 2.00$
B. $\quad \$ 3.50$
C. $\$ 4.97$
D. $\$ 8.50$
59. On most cash registers, two-letter abbreviations identify the different kinds of transactions. If a customer paid for their purchase with a check, which key a breviation would you use?
A. CA - cash sale
B. CH - charge sale
C. PD - paid-outs
D. MS - no sale
60. When a customer returns an riam in exchange for one of lower value, this is known as:
A. an even exchange.
B. a cash refund.
C. an uneven exchange.
D. a charge credit.
61. Some stores may require a $\qquad$ on $C O D$ sales to ensure that the custoner will accept the goods when they are delivered.
A. check at time of purchase
B. credit card number
C. cash deposit
D. second address
62. The main purpose for accurate inventory control is io:
A. decrease liability.
B. increase profits.
C. improve depreciation systems.
D. improve computer inventory systems.
63. Perpetual inventory systems always begin with:
A. physical inventory.
B. model stock plan.
C. basic stock system.
D. Both B and C
64. Under physical inventory system, buyers : ake a(n) $\qquad$ of merchandise.
A. estimate
B. actual count
C. book count
D. computer count
65. Price is extremely important in marketing competition because:
A. it eliminates risk.
66. it's easily measured.
C. it's easily observed.
D. Both 8 and $C$
67. A price leader is:
A. a product of regular quality offered at a very low price for a limited time.
B. the highest price in the store.
C. the best price on the market.
D. the highest price you can charge for that product.
68. The markdown percentage for an item that was selling for $\$ 50.00$, but is now selling for $\$ 40.00$ is:
A. $10 \%$.
B. $1 \%$.
C. 20\%.
D. $2 \%$.

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6 i
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67. In arranging currency and coins in a cash drawer, the smallest denomination(s) of cash and coin should be placed in:
A. the right hand compartments.
B. the left hand compartments.
C. either the right or left hand compartments.
D. none of the above
68. The amount of change kept in your cash drawer depends on:
A. which day it is.
69. the price of the typical items sold.
C. how much money the store makes.
D. how much money the department has on hand.
70. At the end of the day you have:

| Cash in drawer | $\$ 190.00$ |
| :--- | ---: |
| Total voided | 10.00 |
| Total cash paid out | 25.00 |
|  |  |
| less original change fund | 60.00 |
|  |  |
| total sales shown on audit tape | $\$ 145.00$ |

This is a:
A. $\$ 20$ cash shortage.
8. $\$ 20$ cash overage.
C. $\$ 30$ cash shortage.
D. $\$ 30$ cash overage.
 bill?
A. 7 one-dollar bills, 1 quarter, 1 dime, 9 pennies
B. 1 five-dollar bill, 2 one dollar bills, 4 dimes, 4 pernies
C. 1 five-dollar bill, 2 one-dollar bills, 1 quarter, 3 nickels, 4 pennies
D. 1 five-dollar bill, 2 one-dollar bills, 1 quarter, 1 dime, 1 nickel, 4 pennies
71. The tape inside a cash register that shows the amount of cash sales recorded in the register during a reporting period is called a:
A. daily summary tape.
8. customer audit tape.
C. detailed audit strip.
D. sales report tape.
72. Which of the following records is MOI considered when "proving cash"?
A. audit-tape readings of total pay-outs
B. audit-tape readings of total credit sales
C. voided receipts
D. cash report showing the amount of cash turned in at the end of the day

## MARKET PLANHING

73. Product/service planning is important to a company's success in the always changing market place. Because of this, marketers believe in the moto:
A. "Perish and die"
B. "Innovate or perish"
C. "Profit at all cost"
D. "Product before service"
74. One of the stronsest influences on products and product planning is:
A. service.
B. color.
C. competition.
D. price.
75. One of the most widely used ways of obtaining primary data for marketing is:
A. the ponel.
B. observation.
C. survey.
D. test marketing.
76. When using the survey method to gather primary data:
A. you should question every customer in your target group.
77. you should select a random sample of customers.
C. you should ALLHAYS hide the purpose of your survey.
D. do not use the survey method at all - it's too expensive.
78. The division of a total market into grours according to customer needs and characteristics is called:
A. total market anolysis.
79. market segmentation.
C. marieting concept.
D. total market concept.
80. Business Products Inc., is plaming to advertise a new large capacity, three color fax machine. In which magazine should they advertise to reach their target market?
A. Better Homes and Gardens
B. Forture
C. Journal of Appl ied Psychology
D. Reader's Digest
81. A product packaged in a container thet is a different shape and/or size than the competitors' packages is trying to make the product:
A. easy to identify.
B. less expensive to package.
C. easier to handle in shipping.
D. all of the above.
82. A group of similar types of product items which are closely related and are used together or are sold to the same customer groups is called a:
A. product.
B. product item.
C. product line.
D. product mix.
83. A procuct achieves its highest level of sales at the $\qquad$ stage in the product life cycle.
A. introduction
B. growth
C. maturity
D. decline
84. Which step in the product developing process utilizes product design, type, and quality of materiats and manufacturing methods?
A. Preparing a prototype
B. Generating ideas
C. Marketing the product
D. Testing the product

## adVERTISING AND SALES PROMOTION

83. Which printed advertising media is known for superior color reproduction?
A. Newspeper
B. Magazines
C. Direct-meit
D. Billboards
84. Displays designed to appeal to impulse buying are:
A. window displays.
B. point-of-sale advertising.
C. package-inserts.
D. hendbills.
85. Promotion that offers a special price reduction to the buyer is known as:
A. price-oriented promotions.
86. sales-lead premiums.
C. container promotions.
c. sweepstakes.
87. In which of the following ways is advertising most helpful in stabilizing sales volume?
A. Building goodwill
B. Maintaining interest during a slow selling period
C. Increasing customer demand during a peak sales pariod
D. All of these answers are correct
88. Television is a fonin of $\qquad$ media.
A. direct
B. periodical
C. indirect
D. mass
89. One special method used in advertising to encourage direct action by ustomers is the inclusion of:
A. prices.
B. coupons.
C. illustrations.
D. none of the above
90. The cost of radio advertising is:
A. based on market coverage and basic audience.
B. the same for all stations.
C. determined by the National Association of Broadcasters.
D. none of the above
91. A skillfully designed store schematic should give top priority to:
A. merchandise exposure.
92. speeding up customer flow.
C. fire protection.
D. location of bathrooms.
93. Pastei colors would be displayed most effectively during the $\qquad$ season.
A. Fall
B. Winter
C. Spring
D. Sumber

9?. Individual cans of motor 011 are stacked to form a triangle and be easily accessible to consumers. This is a
A. step arrangement.
B. pyramid arrangement.
C. repetition arrangement.
D. radiation arrangement.
93. It is to the manufacturer's advantage if the dealer can place a display at $\qquad$ points in the store.
A. check out
B. exit
C. entrance
D. strategic
94. In a television advertisement for the Army, "Be all that you can be" is:
A. headline.
B. body copy.
C. slogan.
D. Ingo.

SELLING
95. A salesperson should ask questions to:
A. keep the conversation going.
B. show he/she is interested.
C. determine tho the customer is.
D. determine the actual need.
96. When consumer purchases involve feelings such as pride, comfort, and romance, they are based on:
A. desire buying motives.
B. emotional buying motives.
C. rational buying motives.
D. irrational buying motives.
97. The opening of the sale is known as the:
A. reception.
B. showing of the merchandise.
C. approach.
D. salutation.
98. "Ny new, heavy-duty window clearer will save your janitorial service 5100 a month." rhe underlined portion of the above statement is an example of ( $n$ ):
A. feature.
B. adventage.
C. benefit.
D. fab.
E. economic need.
99. Objections say that the prospect is listening and is $\qquad$ in the product.
A. not interested
B. unamare
C. interested
D. Both A and B
100. Questions that prompt the customer to commit him or herself to purchasing merchandise is known as:
A. the last chance to buy.
B. nerrowing the choice.
C. positive sales closing.
D. recognizing selling signals.
101. Follow-up sale is important because:
A. no one can make all $r$ estoners happy.
B. the sa, esperson is interested in future sales.
C. the eustomer may still have objections.
D. you cannot close without follow-up.
102. The best source of merchandise information for a salesperson is $\qquad$ - product.
A. owning and using
B. reading ads about
C. talking with customers whis own
D. talking to the supervisor about
103. To help the consumer buy intelligently, the packaging and labeling act covers most products sold in
$\qquad$ _
A. retail stores
B. catalog stores
C. supermarkets
D. impert stores
104. The best way for a salesperson to convert product facts into customer benefits and/or use is to:
A. shom the product to the customer.
B. talk about the product's features.
C. give demonstration of the product.
D. explain product features to the customer.
105. Which of the following is a false statement regarding product knowledge?
A. Facts and selling appeals should be lused together in a sales presentat m .
8. A sale is based upon gaining the confidence of the customer.
C. Salespeople should avoid learning too much about their competitors' products since hey are likely to become unsold on their own.
D. None of the above
106. When the salesperson shows the customer the item requested and then follows with an item of better quality, the action is called:
A. Fressurized selling.
B. trading-up.
C. quality selling.
D. trading down.
107. $\qquad$ is th selling of related or additional items along with those items the customer has already purchased.
A. Extras
B. Tack-on items
C. Sugyestion selling
D. Closing
108. Recommending that a customer should purchase higher quality merchandise is an example of :
A. trading up.
B. trading down.
C. trading in.
D. trading out.
109. Manufacturers' representatives who seli to wholesalers or industrial users are callea:
A. agents.
B. brokers.
C. retailers.
D. specialty salespersons.

## MARKETING CONCEPTS

110. A distinct characteristic of a business using the marketing concept is:
A. efficient production of goods.
B. better governmental regulations.
C. the use of the latest technology
D. meeting customer needs at a profit.
111. Economics has to deai with the situation that human (consumer) wants are $\qquad$ _.
A. Iimited
B. seasonal
C. unlimited
D. All of the above
112. Which of the following groups of activities make up the marketing process?
A. attention, interest, desire, action
113. transporting, distributing, accounting, buying
C. recordkeeping, typing, cashiering, selling
D. planning, pricing, promotiun, distributing

1i3. Product, price, place, and promotion make up the:
A. marketing concept.
B. marketing mix.
C. management concept.
D. profit concept.
114. There are two types of markets: the $\qquad$ market, and the $\qquad$ market.
A. service, goods
B. industrial, consumer
C. food, general merchandise
D. Non of the above are markets.
115. The study of population patterns whict; is used to identify a market for a produci is called:
A. migration.
B. peychology.
C. demogrephy.
D. sociology.
116. The division of total market into groups according to custoner needs and characteristics is called:
A. market segmentation.
B. consumer market.
C. industrisl market.
D. supermarket.
117. A(n) includes the firms involved with the ownership and possession of goods and services from the point of production to delivery to the consumer or industrial user.
A. Integrated distribution
B. Channel of distribution
C. Selected distribution
D. Train distribution
118. The marnfacturer to consume charnel of distribution is characterized by:
A. sales to wholesalers.
B. sales to agents but no ownership transfer.
C. no middlemen involved.
D. Both A and B
119. Which of the following middlemen holds title to goods?
A. agent
B. merchant wolesaler
C. broker
D. all of the above
120. Which form of dis'ribution allows the manufacturer the greatest amount of control over the marketing of a product?
A. exclusive distribution
B. selective distribution
C. intensive distribution
D. integrated distribution
121. The idea of fulfilling the needs of customers at a profit is called:
A. business conceot.
B. consumption concept.
C. marketing concept.
D. technical concept.

## APPENDIX B

ADMINISTRATIVE DIRECTIONS FOR THE FLINDAMENTALS OF MARKETING TEST

To: Missouri Marketing Educators/Test-site Administrators participating in the State-wide test of the "Fundamentals of Marketing" competencies.

FROM: Cliff Smith, Program Area Coordinator, Marketing Education,
RE: Adninistrative Instructions

You will find enclosed copies of the state "Fundamentals of Marketing" test and scantron answer sheets as per your request.

## DIRECTIONS:

1. You will need to duplicate additional tests if the number enclosed is not sufficient.
2. You should allow at least one class period for the test. There are 12: questions on the test. (It is advised to have students complete the intormation requested in Item $\| 4$ below piior to the class period.)
3. Please have students complete the test and information in \#2 pencil.
4. Enclosed is a copy of side two of the answer sheet. Please have your studerits fill in the appropriate information and BUBBLE CODE the information as follows:
A. Name (LAST, FIRST). Data will only be reported back to you on each individual student and as group data.
B. Sex (Male/Female)
C. Date of Birth (Year/Month)
D. Identification number. Your school's identification number is . Please have your students enter this number and
bubble it in.
E. Grade/Education Level. Have students indicate the grade level that they will be completing this year.
5. Make sure that students have "BUBBLED IN" all the above information.
6. Make sure students start answering the questions on the other side of the scantron answer sheet beginning with Question $\|_{1}$.

1 Upon completion of the test, please return all scantron answer sheets and the original copy of the test to me by either FIRST CLASS MAIL or UPS.
8. Statistics and scores will be available at MVA in July.
9. A return mailing label addressed to me is enclosed for your use.

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## APPENDIXC

LETTER REQUESTING PARTICIPATION IN THE FUNDAMENTALS OF MARKETING STATE-WIDE TEST

College or Education

Department of Practical Arts and Vocational Iechnical Laducation Marketing Education

¿G2 London Hall<br>Columbia Missourr 65211<br>elepthone (314) 8826058

January 4, 1990

TO. Missouri Marketing Educators
FROM: Cliff Smith, Marketing Education
RE Statewide Fundamentals of Marketing Test
I would like to invite you to administer the "Fundanentals of Marketing" test. This test takes approximately one hour to administer and is designed to test the core competencies within marketing. The administration of this test is voluntary although it would be nice to see all Missouri schools that offer a marketing class administer the test. It is an excellent tool to gauge and compare your students comprehension of marketing competencies with the state average.

Your school will receive a certificate of recognition if you choose to participate in this test. Students will also receive a certificate of recognition if they:
achieve 70-79\% on the test .. Bronze Award
achieve $80.89 \%$ on the test .. Silver Award achieve $90 \%$ or better on the test .. Gold Award.

Please inform me of your decision by January 31,1990 by returring the completed form below. Thank you

NAME $\qquad$

SCHOOH $\qquad$
Mailing Address $\qquad$
CITY $\qquad$ , MO ZIP $\qquad$ SCHOOL PHONE $\qquad$
$\qquad$ Yes, $I$ plan to participate in the statewide test. I will need (number of answer forms. I plan to administer the test on the following date:
$\qquad$ No, Sorry I won't be able to par icipate this year.

RF. .N BY JANUARY 31, 1990 TO.
Cliff Smith
Marketing Education
202 London Hall
University of Missouri-Columbia
Columbia, MO 65211
(314) 882-6058

## APPENDIX D

SCHOOLS PARTICIPATING, NUMBER OF STUDENTS PARTICIPATING, NUMBER RECEIVING CERTIFICATES OF ACHIEVEMENT, PERCENT OF STUDENTS RECEIVING CERTIFICATES, AND MEAN TEST SCORE FOR ALL PARTICIPANTS OF THE SCHOOL

SCHOOLS PARTICIPATING, NUMBER OF STUDENTS PARTICIPATING, NUMBER RECEIVING CERTIFICATES OF ACHIEVEMENT, PERCENT OF Students receiving certificates, and mean test score FOR ALL PARTICIPANTS OF THE SCHOOL

| Scyod | NO. OF STUDENTS PARTICIPATING | NO. OF STUDENTS BECEIVINGCERT | \% | XSCORE |
| :---: | :---: | :---: | :---: | :---: |
| Aurora H.S. | 33 | 8 | 24.2 | 63.4 |
| Belton H.S. | School did not retur | tests for scoring |  |  |
| Berkley H.S. | 14 | 0 | 0.0 | 64.9 |
| Blue Springs H.S. | 26 | 2 | 7.7 | 51.0 |
| Bolivar H.S. | 22 | 5 | 22.7 | 56.5 |
| Brookfield AVTS | 22 | 9 | 40.9 | 79.7 |
| California H.S. | School did not retu | tests for scoring |  |  |
| Cape Girardeau AVTS | 16 | 6 | 37.5 | 74.9 |
| Carthage AVTS | 27 | 4 | 14.8 | 66.1 |
| Cass County AVTS | 16 | 3 | 18.8 | 56.2 |
| Center H.S. | School did not retu | tests for scoring |  |  |
| Clinton AVTS | 39 | 12 | 30.8 | 73.3 |
| Eldorado Springs H.S. | School did not retu | tests for scoring |  |  |
| Excelisor Springs (West) H.S. | 31 | 4 | 12.9 | 60.3 |
| Four Rivers AVTS | 21 | 2 | 9.5 | 66.9 |
| Fox H.S. | 65 | 3 | 4.6 | 59.1 |
| Francis Howell H.S. | School did not ret | tests for scoring |  |  |
| Francis Howell North H.S. | 78 | 35 | 44.9 | 78.3 |
| Franklin AVTS | 38 | 8 | 21.1 | 70.1 |
| Fulton H.S. | 18 | 3 | 16.7 | 63.2 |
| Glendale H.S. | School did not relu | tests for scoring |  |  |
| Graff AVTS | 18 | 3 | 16.7 | 67.4 |
| Grandview H.S. | 44 | 1 | 23 | 52.3 |
| Hazelwood Central H.S. | School did not relu | tests for scoring |  |  |
| Hazelwood East H.S. | 24 | 6 | 25.0 | 71.2 |
| Hazelwood West H.S. | 20 | 2 | 10.0 | 66.3 |
| Hickman H.S. | 34 | 10 | 29.4 | 72.8 |
| Jefferson College | 25 | 12 | 48.0 | 79.2 |
| Kickapoo H.S. | 54 | 12 | 22.2 | 71.1 |
| Laclede AVTS | 41 | 5 | 12.2 | 64.0 |


| Lake AVTS | 25 | 6 | 24.0 | 59.0 |
| :---: | :---: | :---: | :---: | :---: |
| Lee's Summit H.S. | 44 | 1 | 2.3 | 47.9 |
| Liberty H.S. | 36 | 27 | 75.0 | 90.0 |
| Lindbergh H.S. | 39 | 3 | 7.7 | 61.2 |
| Macon AVTS | 19 | 2 | 10.5 | 73.5 |
| Mehville H.S. | 55 | 6 | 10.9 | 56.0 |
| Mexico AVTS | 26 | 16 | 61.5 | 82.3 |
| Neosho H.S. | 45 | 11 | 24.4 | 72.3 |
| Nichots Career Center | 20 | 6 | 30.0 | 73.3 |
| Nixa H.S. | 16 | 2 | 12.5 | 74.8 |
| North Central AVTS | 16 | 3 | 18.8 | 65.9 |
| North Kansas City H.S. | 39 | 3 | 7.7 | 41.4 |
| Oakville H.S. | 35 | 0 | 0.0 | 55.0 |
| Odessa H.S. | 32 | 9 | 28.1 | 73.4 |
| Pacific H.S. | School did | for s |  |  |
| Parkway North H.S. | 56 | 20 | 35.7 | 75.9 |
| Parkway South H.S. | 42 | 10 | 23.8 | 69.1 |
| Parkway West H.S. | School did | for s |  |  |
| Pattonville Postive H.S. | 4 | 4 | 100.0 | 90.0 |
| Platte County AVTS | 49 | 12 | 24.5 | 70.3 |
| Poplar Bluff H.S. | School did | for s |  |  |
| Ritenour H.S. | 80 | 5 | 6.3 | 57.1 |
| Rockbridge H.S. | 10 | 5 | 50.0 | 81.5 |
| Rolla AVTS | 32 | 2 | 6.3 | 55.8 |
| Saline County Career Center | 29 | 6 | 20.7 | 61.3 |
| School of the Osage H.S. | 26 | 16 | 61.5 | 82.7 |
| Southwest H.S. | 13 | 1 | 5.3 | 57.6 |
| St. Charles H.S. | 31 | 7 | 23.3 | 60.3 |
| St. Charles West H.S. | 37 | 5 | 13.5 | 67.9 |
| Tipton H.S. | 21 | 6 | 28.6 | 71.1 |
| Tri-County AVTS | 22 | 0 | 0.0 | 38.2 |
| Truman H.S. | School did | for s |  |  |
| Versailles H.S. | 53 | 20 | 37.7 | 76.7 |
| Warrenton H.S. | 38 | 10 | 26.3 | 70.0 |
| Waynesville AVTS | 46 | 4 | 8.7 | 55.3 |
| Webster Groves H.S. | 27 | 9 | 33.3 | 72.6 |

School did not return tests for scoring $33 \quad 7 \quad 21.2$ 67.1 School did not return tests for scoring 1,827 399 21.8 66.07

- 69 Schools agreed to participate in the state-wide test, but only 56 schools returned tests for scoring and inclusion in the overall data. Two schools returned tests after the June 15, 1990 cutoff date and were not included in the totals.

NOTE: Certificates of achievement were awarded to students who attained a score of $70 \%$ or better on the state-wide test.

# APPENDIXE <br> CERTIFICATES OF ACHIEVEMENT AND CERTIFICATE OF PARTICIPATION 

## This fiereby certifies that

## fas received a score of NINETY PERCENT or BETJER

 on the Missouri Fundamentals of Marketing Jest. Based on this outstanding acfievement, the above is honoredwith the

## GOLD AWARD

May afl recognize this student's fard work and accomplisfument in the field of Marketing.

# This hereby certifies that 

fas received a score of ELGFTV to ELGHTU-NTNE PERCENT on the Missouri Fundamentals of Marketing Jest. Based on this outstanding achievement, the above is fhonored

## with the <br> SLLVER AWARD

May aff recognize this student's hard work and accomplisfiment in the field of Marketing.

signed - Dr Gene Reed Director of Marketing and Cooperative Education

## This hereby certifies that

## frs received a score of SEVENTY to SEVENTY-NTNE PERCENT

 on the Missouri Fundamentals of Marketing Jest. Based on this outstanding achievement, the above is honored
## with the BRONZE AWARD

May all recognize this student's fard work and accomplishment in the field of Marketing.


Signed - Dr. Gene Reed Director of Marketing and Cooperative Education
signed - High School Marketing Teacher

## This hereby recognizes that

has satisfactorily participated in the Missouri Fundamentals of Marketing Test.

May all recognize this school's fard work and achievement in the fiefd of Marketing Education.



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     orginaling 4
    Minor changes have been made lo mpruve produrtion quality
    - Points of view ot opimions stated inthis da $u$ OERI DOsition of pohicy

[^2]:    "The activity which is the subject of this report was supported in whole or in part by funds from the Department of Elementary and Secondary Education, Division of Vocational and Adult Education. However, the opinions expressed herein do not necessarily reflect the position or policies of the MIssouri Department of Elementary and Secondary Education or the Division of Vocational and Adult Educption, and no official endorsement should be inferred."

