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THE SMALL GROUP RESEARCH PROJECT: AN EXPERIENTIAL LEARNING APPROACH FOR UNDERGRADUATE MARKETING RESEARCH STUDENTS

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ABSTRACT

As an alternative to a "straight from the book" instruction approach, the author proposes a *six* step experiential learning approach. The recommended approach is compatible with most currently available marketing research textbooks, and encourages greater motivation and learning by means of a shared-group work experience. A description of the basic technique and illustrations of some of the teaching aids are provided.

INTRODUCTION

Teaching the undergraduate marketing research class can often be a tedious and sometimes low reward instructional task, due to the technical nature of the subject matter, as well as many students' propensity to view the subject area as being a bit "dry." The author concluded that the latter view was primarily the result of following a traditional "straight from the textbook" instructional approach, and that by introducing a form of experiential learning, a high level of student involvement, as well as, improved motivation and retention of material could be achieved. The result was the evolution of a learning–by doing approach which has been applied successfully with both American and British students, and is compatible with the majority of currently popular marketing research texts. An added plus is that students gain a "hands on" knowledge in applying one of the most widely used computer statistical packages, the S.P.S.S. program, through a specially prepared outline handout on the most popular analysis routines.

BASIC APPROACH

The first step in adopting this method of instruction is to begin to build up a file of potential research projects in the school and surrounding community. This should preferably be done at least a semester in advance of actually using the approach, in order to accumulate a sufficient number and variety of projects. For example, managers of retail stores and service institutions like banks can be approached with the offer of a free (or low cost) customer analysis and store image survey, by local university business school students. Other non-profit organizations like theater groups or museums also represent potential clients. And finally, the various departments of the university itself, such as the campus radio station or bookstore, are often interested in a customer survey type of analysis. The primary goal is to build up an adequate range of different types of organizations, to coincide with the varied interests of business students. Once the course has offered this service for a semester or two, word-of-mouth usually generates a continual inflow of potential projects.

The second step involves setting up the actual study teams in class, and assigning each team a project in which each student is actually interested. The approach used by the author is to select a good range of projects from the pool of projects on file, then invite a representative from each organization to come to class and present some background on the nature of their organization, and its goals and information needs. Students are encouraged to ask questions in order to clarify the specific objectives of the potential research.

An optimum group size is in the range of four to seven students, which allows for a high level of interaction and cooperation. For example, if the class has 25 students enrolled, between four and five projects would be required. Should an insufficient number of suitable "real world" projects be available, the instructor can add one of his or her own, of a more academic orientation, perhaps describing a new trend in consumer behavior or similar topic. For example, in the past, descriptive studies have been conducted on at-home shopping and a profile of video-game players. In this case, the instructor must "sell" the usefulness and importance of such a study to the class, through a presentation much as the outside clients make. These presentations should be made at the rate of one or two per week, so that all the research alternatives are known to the students by the end of the first month of classes. The presentations serve to convince the students that their efforts will be worthwhile and actually used to guide management decisions. On the date of assigned team formation, the projects are listed on the blackboard and students are asked to volunteer in turn, for each of the projects, and to select one in which they are interested. If too many attempt to sign up for a given project, a verbal "push" is given on the merits of the remaining projects, to encourage students to voluntarily transfer their choice until all project teams have enough members.

The author provides each student with a "Research Project Timetable" (see Exhibit 1) during the first class meeting, which spells out the sequence of group work in some detail, along with completion deadlines for each activity phase. This helps the students to see how their projects will develop, and to plan each phase in advance. The schedule has been used with both a twice per week and three times per week class meeting schedule. The latter is preferred however, as it allows the instructor to keep closer tabs on group progress, and facilitates providing time in class for supervised team work sessions.

The third step in this experiential approach is to carefully schedule lecture topics so that a phased learning-then-doing approach is followed. Although this may require covering some text chapters in a different order from that in the book, it maximizes the learning reinforcement from small group application sessions, through each of the stages of the research process. The instructor should strive to keep about one chapter ahead of what the teams are working on.

The fourth step, which is optional but highly recommended, is to provide the students with some means of computerized tabulation and statistical analysis. This is desirable for several reasons. First, it most closely approximates the "real world," and gives students some experience in coping with the need to reduce the results of numerous printouts to the essentials required for decision making. Second, although most students have been exposed to the subject of computer programming, they have little awareness of the benefits of using an available packaged routine. The major obstacle impeding the experience is the rather formidable instruction manuals the user is required to master in order to gain a sufficient knowledge to operate the programs.

In the current approach, this problem was overcome through the development of a highly simplified "Introduction to S.P.S.S." handout (see Exhibit 2) by the author. This, in combination with about 60 minutes of in-class instruction, enables each student to set up and run a simple cross-tabulation homework problem. Completion of the problem gives the students sufficient confidence to then apply the S.P.S.S. routine to their own data (which is punched on cards) and to use a range of available procedures, such as t-tests and correlation analysis. It also greatly speeds up the analysis phase; two or three computer runs are usually sufficient to accomplish the individual project research objectives.

The fifth step consists of scheduling a formal presentation of the results and team recommendations to each of the outside research clients, during the final class meetings. Knowing that their clients will actually attend and ask questions "spurs" the students on to prepare carefully thought-out summaries of their results and conclusions, which are usually presented with the aid of an overhead projector. These results are incorporated into a final typewritten report one week after the presentation, which is given to the client. Although any charges to the client are at the instructor's discression, in the past, these have been either in the form of a voluntary donation to the Marketing Department discressionary fund, or perhaps taking the team members out to dinner.

The last step, that of having each student rate the contribution of his fellow teammates is essential. A form like that shown in Exhibit 3 can be used, and administered during the final examination. The knowledge that they will be evaluated by their peers encourages most team members to shoulder their fair share of the work. In the author's course, the evaluation constitutes 25 percent of the course grade, and is weighted by the grade on the group project.

General acceptance of this teaching approach by students has been enthusiastic, based not only on annual class evaluations, but on the number of students expressing a strong interest in making marketing research an initial career choice upon completion of the course and their degrees. Reaction of outside "clients" both from the community and other departments of the university has been strongly affirmative, and has served to enhance the awareness and image of both the Marketing Department and undergraduate business degree program at Murray State University.

EXHIBIT 1

MARKETING 565 RESEARCH PROJECT ROUGH TIMETABLE

	Team Activity Step	Activity Step Completed By:
1)	Organization of Team and leader	October 3
2)	Determination of research objectives, information required	October 8
3)	Development of specific questions	October 15
4)	Construction of initial questionnaire	October 17
5)	Pretest of initial questionnaire	October 26
6)	Modification and final printing of questionnaire	November 5
7)	Field work: data collection by Team (2 weeks)	November 16
8)	Editing, coding, and punching of questionnaire	November 19
9)	Initial computer run of data	November 26
10)	Review of initial computer run	November 28
11)	Secondary run(s) of data completed	December 3
12)	Review analysis of final computer runs	December 5
13)	Writeup of various sections of final report	December 7
14)	Class presentation of significant study findings	December 10 & 12
15)	Completion of final draft of report	December 14

EXHIBIT 2

S.P.S.S. CARD DECK SET UP--CORRECT CARD ORDER

```
// (Job card--content depends on installation)
//ST1 EXEC SPSS
RUN NAME        your title. .
1               16
                                up to 8 letters each,
                                don't split a name
                                across 2 cards
VARIABLE LIST   name,name. . .
  (2nd listing card) ->
                16
                name,name,. .
                16
INPUT MEDIUM    CARD
                16
INPUT FORMAT    FIXED (see p. 2)
                16
N of CASES      nnn. . .
                16
MISSING VALUES  name to name (0)
                16
READ INPUT DATA
  [where variables consist of 2 or more columns,
   the numbers should be "right justified" Ex./1->01]
CROSSTABS       TABLES=name BY name
1               16
                /name BY name. . .
OPTIONS          9 (calls for index to tables)  } may
1               16                              } be
STATISTICS       1 (for Chi-Square Test)        } omitted
1               16
FINISH
//

<- Your data cards
<- Your desired procedure cards
```

Note: Table statements may be shortened by using the "TO" convention Ex/

```
TABLES = name BY name TO name
16
```

EXHIBIT 2
(page 2)

Input Format Statements

1) each column on IBM card must be specified, i.e., computer told either to "read" or "skip."

2) the columns are referred to in sequence from 1-80

3) nomenclature:
   SKIP STATEMENT: is represented by "X"

```
        Ex/ FIXED(3X,. . .)
            16
            (Skip first 3 cols.)
READ STATEMENT:
        Ex./ FIXED(3X,F1.0,. . .)
        Skip first 3 cols., read next col. as
        one variable

        Ex/ FIXED(3X,15F1.0,. .
        Skip first 3 cols. read next 15 cols.
        as one var. each
```

EXHIBIT 2
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Cards for "Massaging the Data"

```
RECODE          INCOME(1,2=1)
1               16
                (3,4=2)(5,6,7=3)
                        or
                INCOME(1 THRU 3=1)
                16
                (4 THRU 7=2)
```

- purpose is to collapse the number of score categories for a variable
- a separate recode card must be inserted for each variable to be recoded.
- deck placement: recode cards should be inserted just prior to the "READ INPUT" card in the deck, unless a "MISSING VALUES" card is present, in which case it should proceed the "MISSING VALUES" card.

```
MISSING VALUES  name, name,
                16
                name TO name
                (0)
                value to be considered missing
```

- purpose is to enable program to identify cases with missing data (such as "no answers") so they may be deleted from arithmetic calculations
- deck placement: just prior to the "READ INPUT" card

```
*SELECT IF      (RACE EQ 2)
1               16
```

- purpose is to create a temporary sub-data set, having the desired value(s), then run a procedure using just the cases in this new data set.
- deck placement: just prior to the procedure (such as "FREQUENIE S") by which the selected cases are to be processed.
- the sub data set is temporary, existing only until the end of the procedure.

EXHIBIT 2
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More S.P.S.S. Procedures

```
FREQUENCIES      GENERAL=name
1                16
                 name        or
                 name TO name

OPTIONS          3,8,9
                 16
```

3 causes tables to be printed in 8½" x 11" format to fit standard reports
8 causes a histogram to be printed for each variable
9 causes a table of contents to be printed

```
STATISTICS       1,3   mean   median

T-TEST           GROUPS=name/
1                16
                 VARIABLES=
                 name,name or
                 Var TO Var

Example:         GROUPS=RACE/
                 16
                 VARIABLES=
                 EDUC,INCOME
```

- This would compare the mean education of race 1 to race 2 and tell if it is significiantly different.
- would do the same for income
- t-test should only be used for varibles that are internal, or ratio-scaled (Ex. The Semantic Differential)
- this version of the t-test is for independent samples; for related samples, use "T-TEST PAIRS"

EXHIBIT 2
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ADVANCED S.P.S.S. PROCEDURES

(To be used with only interval or ratio-scaled variables.)

```
REGRESSION                  VARIABLES=name,
(provides simple or         16
multiple regression         name/
analysis)                         or
                            nameTOname
                            REGRESSION=Var
                            16
                            WITH Var1,Var2,
                            Var3,(2)/
                            independent        dependent
                            variables          variable
                            ("TO" convention applies)
                            1 - ordinary regression
                            2 - stepwise regression

STATISTICS                  ALL
1                           16
.........................................................

SCATTERGRAM                 name WITH name
1                           16
                            /name WITH
(plots a scattergram of
two variables)              name
STATISTICS                  ALL
                            (correlation coefficient,
                            significance, slope,
                            intercept)
.........................................................

PEAR CORR                   name WITH name,
(computes r, the            16
correlation coef-           name, . .
ficient, r^2, and
indicates significance)           or
                            name TO name
.........................................................

ONEWAY                      var1 TO var5 BY
(provides an                16
                                            max value
analysis of                 varx (1,6)/    min value
variance to
compare                     dependent variables  independent variable
the means
of independent groups with F-test of significance)

STATISTICS                  ALL
                            16
```

EXHIBIT 3

MARKETING 565, MARKETING RESEARCH

RATING FORM OF INDIVIDUAL CONTRIBUTION TO GROUP TASK

Instructions: In the blanks provided, list the names fo the other members of your task group. Do not list yourself. For each member circle the number which you feel best describes the relative contribution of that individual to work involved in your group assignment.

	Relatively Little		Average		A Major Contribution
_____	1	2	3	4	5
_____	1	2	3	4	5
_____	1	2	3	4	5
_____	1	2	3	4	5
_____	1	2	3	4	5
_____	1	2	3	4	5