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The University of North Carolina at Greensboro, Ed.D., 1975
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## a MODEL FOR A STUDENT-CENTERED TEAGHING PLAN

## IN BASIC BUSINESS

by<br>Gwendolyn Starling Watson

A Dissertation Submitted to
the Faculty of the Graduate School at The University of North Carolina at Greensboro in Partial Fulfillment
of the Requirements for the Degree Doctor of Education

Greensboro
1975

Approved by
$\frac{\text { Seange }}{\text { George PGGill, Adviser }}$

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

$\frac{\text { Mavch 21, } 1975}{\text { Dote of Acceptance by Comilttee }}$

WATSON, GWENDOLYN STARLING. A Model for a Student-Centered Teaching Plan in Basic Business. (1975) Directed by: Dr. George P. Grill. Pp. 237.

The problem of this study was to develop a model for a studentcentered plan of teaching Introduction to Basic Business at the secondary school leve1. The purposes were (1) to provide an alternative approach to teaching basic business so that the students and the teacher will be intimately involved in the learning process, (2) to propose a realistic plan that will provide a stimulating environment for cognitive achievement and positive affective development, and (3) to enhance the overall image of the basic business course. It was hypothesized that there would be no significant differences in student achievement in the studentcentered class when compared to student achlevement in the traditional class. A second hypothesis proposed that there would be a significant difference in positive student attitude in the student-centered class when compared to student attitude in the traditional class.

Two secondary school Introduction to Basic Business classes, consisting of a total of forty-three students, participated in the study. The classes were randomly assigned as student-centered and traditional. The same teacher was responsible for both classes.

Student achievement was measured through the use of the Test of Understanding in Personal Economics. The test was administered at the beginning of the semester as a pre-test and at the end of the semester as a post-test. The statistical technique employed for analysis was a oneway analysis of covariance. The pre-test score was identified as the covariate.

Student attitude was measured by a seven-concept semantic differential developed by the researcher. The semantic differential was administered at the beginning of the semester as a pre-test and three additional times during the semester as a post-test. The pre-test score was specified as the covariate to be used with each of the three succeeding rating scores. Statistical analysis was performed through a two-way analysis of covariance with repeated measures.

Several anthropological research techniques, including interviews, observations, journals, and reaction questionnaires, were used to collect additional information relating to classroom activities and student and teacher reactions. The data obtained through these methods were not analyzed statistically.

A statistical analysis of student achievement in the two classes showed no significant difference in student achievement in the studentcentered Introduction to Basic Business class when compared to student achievement in the traditional class. The findings indicated that the students in both classes increased in knowledge about basic business, as measured by the specific instrument, as the semester progressed. The hypothesis of no significant difference in student achievement was accepted.

Student attitude, as measured by the semantic differential, showed no significant difference in student attitude in the studentcentered class when compared to student attitude in the traditional class. Therefore, the hypothesis relating to significant differences in student attitude was rejected. However, when the two classes were compared at
each of the three testing dates, there was a positive increase in attitude in the student-centered class on each of the three dates which was not indicated in the traditional class. The student-centered class increased positively as the semester progressed from pre-test to final post-test dates. In the traditional class, there was a decrease in positive attitude from pre-test to final post-test dates on several concepts.

Data collected through the student and teacher journals and reaction questionnaires, the researcher's observation notes, and interviews were presented and discussed. The information provided through these techniques revealed the feelings of the teacher and the students In the two Introduction to Basic Business classes. The researcher's notes, obtained through observation of the two classes, revealed the impressions gained by the researcher in both classroom situations. On the basis of the statistical analysis, it was concluded that there was no significant difference in student achievement or at itude in the student-centered class when compared with the traditional class. However, the analysis did indicate that as the students gained experience in a student-centered atmosphere, there was a trend toward more positive attitudes. The overall conclusion was that the proposed student-centered model was an effective method of teaching Introduction to Basic Business.

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## Chapter 1

## INTRODUCTION

The American system of education has received severe criticism in the past decade. Students, parents, educators, and taxpayers have pointed to the failure of the schools to produce individuals who can participate in a full and meaningful life.

Koh1 ${ }^{1}$ has emphasized that there is basically one school system which most American youth must attend-the public school. He has described the American public school system as authoritarian and oppressive and has charged that it does not allow students to make decisions which will affect their lives.

The schools have also been accused of stifling tine creativity and imagination of the students. Holt asserted that 'most children in school fail. . . . For a great many, this failure is avowed and absolute. . . . Many others fail in fact if not in name." 2 He further explained that

There is a more important sense in which almost all children fail: Except for a handful, who may or may not be good students, they fail to develop more than a tiny part of the tremendous capacity for learning, understanding, and creating with which they were born and of which they made full use during the first two or three years of their lives. ${ }^{3}$

[^0]In view of these criticisms, the purpose of education should be considered. Whitehead succinctly stated this purpose as follows: "The students are alive, and the purpose of education is to stimulate and guide their self-development. ${ }^{14}$ Most educators agree that the selfdevelopment of the individual is the most important goal of the educational system.

Educational leaders, in an attempt to come to grips with the accusations against the schools, have concerned themselves with various ideas and approaches, such as the open classroom, behavioral objectives, and humanistic or student-centered education.

One approach, which is not new but which has received much attention, is the Tyler rationale for curriculum development. Tyler stated that the following four questions must be answered when developing curriculum:

1. What educational purposes should the school seek to attain?
2. What educational experiences can be provided that are likely to attain these purposes?
3. How can these educational experiences be effectively organized?
4. How can we determine whether these purposes are being attained? ${ }^{5}$

The approach used by Tyler included the selection of certain behaviors or objectives to be performed or achieved by the learner. The task of the

[^1]teacher was to construct activities which would lead to these ends and to develop a method of evaluation to determine if the objectives had been achieved.

In a technological society, educators may accept an approach similar to that of an economic system, particularly when such terms as "accountability" and "relevance" are prevalent. In fact, such ideas as the "systems approach to learning" and "performance objectives" are present in the literature. Since this generation has grown accustomed to the profitability of a saleable product, the educational system can be viewed in these terms. Zaret ${ }^{6}$ has indicated that the emphasis on learning achievement and the assessment of this achievement as the criterion for learner and teacher success exemplify the technological position in education today.

Many educators are beginning to question the use of this prescriptive type of educational system. In essence, "someone else," other than the learner, is making the decisions relating to "what is to be learned," "how it is to be learned," and "how to know when it has been learned." It becomes immediately apparent that value judgments are being made by the "decision makers" in determining what is important in the lives of youth.

Macdonald, in expressing his views on this technological approach, asserted the following:

If we do this we have gained control over the educational process, but what have we lost?
${ }^{6}$ Esther Schwartz Zaret, "Differentiating Teaching Behavior From A Humanist Existential Perspective" (unpublished Doctoral dissertation, The University of Wisconsin, 1967), p. 6.

1. First, we have reduced all human behavior to performative acts. We have said in effect that what takes place internally is either illusory or irrelevant to our concern.
2. Second, we have denied the usefulness of other forms of human rationality, . . . We must proceed with care. Technological rationality objectifies, but does it explain all. 7

Rogers presented the following view of such a prescriptive pro-

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cess:
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When we put together in one scheme such elements as a prescribed curriculum, similar assignments for all students, lecturing as almost the only mode of instruction, standard tests by which all students are externally evaluated, and instructorchosen grades as the measure of learning, then we can almost guarantee that meaningful learning will be at an absolute minimum. 8

## STATEMENT OF THE PROBLEM

As one alternative to the technological position, the "humanistic" or "student-centered" approach to education has appeared. The problem of this study was to develop a model for a student-centered plan of teaching Introduction to Basic Business at the secondary school level. The developmental process included the (1) design of the plan, (2) description of the plan, (3) implementation of the plan, and (4) evaluation of the effectiveness of the plan through a comparison with a traditional method

7 James B. Macdonald, "Perspective on Technological Rationality in Education" (paper presented at the A.S.C.D. Research Institute, Western Section, Minneapolis, Minnesota, September, 1966).
${ }^{8}$ Carl R. Rogers, Freedom to Learn (Columbus, Ohio: Charles E. Merrill Publishing Company, 1969), p. 5.
of teaching Introduction to Basic Business on the basis of student achievement and attitude.

PURPOSES OF THE STUDY

The purposes of this study were (1) to provide an alternative approach to teaching basic business so that the students and the teacher will be intimately involved in the learning process, (2) to propose a realistic plan that will provide a stimulating environment for cognitive achievement and positive affective development, and (3) to enhance the overall image of the basic business course.

NEED FOR THE STUDY

The course, Introduction to Basic Business, has received criticism from business students and from educators inside and outside the field. Business students have charged that the course is dull and boring. Business teachers have accused school administrators of assigning only the low-ability students to the basic business class. Educators outside the field of business have not respected the course, possibly because it has not been respected by its own advocates. The content of the Introduction to Basic Business course has been described as irrelevant and repetitious. The traditional methods of instruction-textbook, lecture, exercises, and tests--have not "reached" the students enrolled in Introduction to Basic Business.

Many of the above criticisms are justified. Therefore, the course, its content, and the instructional methods need to be carefully examined.

With the increased awareness today of the importance of economic understanding for all citizens, the opportunities for revitalizing the Introduction to Basic Business course are abundant. Since one of the major goals of business education has been to contribute to the general education of all students, this increased emphasis on economic understanding offers another opportunity for fulfilling this goal. Not only should business educators welcome these opportunities for involvement, but they must also accept the responsibility for providing educational experiences which will contribute to a better economic understanding and a better life for youth.

In attempting to develop a curriculum plan for the Introduction to Basic Business course, the designers must be constantly aware that the content and instructional methods must be adaptable to students of all levels of ability. In fact, the basic business course may make its greatest contribution to the below-average student since this may be his only opportunity to encounter economic and financial problems with which he must deal on a personal basis in his everyday life.

Although the weaknesses of the Introduction to Basic Business course have been identified by classroom teachers and professional business educators, few constructive suggestions for improvement have been made. The "student-centered" approach suggested in this study, the development of an interesting and exciting learning environment, and the freedom with which the student can determine his own objectives will provide a possible solution to some of the critical problems prevalent In the Introduction to Basic Business course today.

## DEFINITIONS OF TERMS

In order to clarify the meaning of specific terms as used in this study, the following words were defined:

Introduction to Basic Business is a beginning elective course in the business education curriculum and is offered at the ninth or tenth grade level.

The student-centered approach focuses on the learner as the major component in the educational process. The learner selects personal objectives which emerge from his own experiences. The teacher plays a supportive role and the school and the community provide the learning environment. (Synonymous with "humanistic" approach.)

Initial learning activities are the beginning points from which a variety of experiences are developed. The initial activities are placed in the learning activity centers in the classroom and may involve materials, resource persons, projects, or ideas.

The traditional approach includes the use of textbooks, lectures, exercises, discussions, and examinations as the basic instructional methods.

A journal is a collection of daily thoughts and feelings, in written form, kept by the students and the teacher.

Student achievement refers to student performance as measured by a specific test.

Student attitude refers to student attitude as measured by a specific instrument.

## LIMITATIONS OF THE STUDY

This study was limited to two intact Introduction to Basic Business classes, taught by the same teacher, in one public secondary school. The study was also limited to the "student-centered" approach as defined in this study and does not include "student-centered" education as generally described in the educational literature, such as a behavioral approach.

HYPOTHESES OF THE STUDY

The following hypotheses were investigated in this study:

1. There will not be a significant difference in student achievement in the student-centered Introduction to Basic Business class when compared to student achievement in the traditional Introduction to Basic Business class.
2. There will be a significant difference in positive student attitude toward Community, School, Basic Business Course, Basic Business Classmates, Teaching, Learning, and Me (self) in the student-centered Introduction to Basic Business class when compared to student attitude in the traditional Introduction to Basic Business class.

## Chapter 2

## REVIEW OF RELATED LITERATURE

In reviewing the literature a careful search was made to determine the studies which related to the humanistic or student-centered approach to learning. As is evidenced here, the amount of experimental and descriptive research in this area is limited.

There are a number of possible reasons for the limited amount of research in this area. First, the humanistic approach to education is a relatively new concept. In recent years, the term has been used rather loosely by many educators to describe various types of programs. There also appears to be a lack of a basic set of evaluative criteria with which the approach can be assessed. And, most of the humanistic curricula are still in the process of development at this time.

The literature review is presented in three sections: (1) the concept of humanistic education, (2) the effects of the humanistic concept on teacher and learner behavior, and (3) the student-centered approach in the area of basic business.

## REVIEW OF LITERATURE PERTAINING TO THE CONCEPT OF HUMANISTIC EDUCATION

Macdonald, Wolfson, and Zaret proposed a humanistic-existential personal model of learning described as

[^2]immediate experience; then further cycles of exploring, integrating, and transcending from new levels of consciousness. These aspects are not seen as discrete stages in a hierarchy; there is a continuing back and forth flow from one facet to another. At a given time, one or more may be occurring. 1

In developing a humanistic curriculum, the learner is the most important component, and it is his needs which are of most concern. However, the involvement of other factors (such as materials and resource persons) is apparent because these individual needs are to a large extent determined by the present environment and the previous environments with which the learner has been involved. The major goal is to provide an environment with which each learner can interact to fulfill a particular need at any time he is ready. In order to provide this environment, the students, the school, and the community must participate.

## The Role of the Learner

As the learner experiences his environment, he develops a set of individual objectives which might lead $h$ im in various directions. The objectives emerge as the interaction between environment and learner takes place. These "learner-initiated" objectives then take on the personality of the individual and become his own. By allowing the student this type of freedom, opportunities are being provided for experiences, feelings, and emotions which can be internalized by the learner.

[^3]
## Organization and Structure

The humanistic approach does not eliminate overall or long-range goals for the school. There are, of course, goals which express the purposes or reasons for the school's existence. The goals are not stated as objectives to be achieved by all learners following a specified pattern, but are necessary so that at some point an observation of the success of the curriculum may be made. These goals change as society, culture, knowledge, and human interests change.

Macdonald has stated that organization and structure are important aspects of the learning environment. A wide range of learning activities must be carefully planned so that there will be many alternatives from which the learner may select a "match" for his own interests. ${ }^{2}$

A learning environment in which activity and opportunity exist does not just "happen"; detailed planning and organization are essential. The planning is done by the teacher and the learner as the experiences are taking place. Any resources in the school or community can be tapped as the need arises for their incorporation. The planning itself is a major part of the learning process. With this approach, the needs of the learner at a given time are those of importance. As he engages in various experiences, his needs are extended and again the learner deals with those that are pertinent to his "world" at the time.
${ }^{2}$ James B. Macdonald, "Organizing Centers as Alternatives to Behavioral Objectives" (Greensboro, N. C.: The University of North Carolina at Greensboro, 1972), p. 4 (Mimeographed), citing J. McV Hunt, "Introduction," The Montessori Method (New York: Schocken Books, Inc., 1964), pp. xi-xxxix.

The instructional materials will be provided by the teacher, the learner, and the community. These materials may include anything from programmed activities for individual use to costumes for a group play.

Through such a student-oriented process, in which the learner and the teacher become partners and frequently exchange roles, the learner will be able to internalize the understandings and experiences because he will be free to select them when he is ready and to pursue them as he desires.

## The Role of the Teacher

The role of the teacher in this learning environment is as a 'helper." She assumes a supporting role in engaging with the learner in the planning and self-evaluation of his experiences. The teacher must also plan and work with other members of the school and the community to assure a continuity of experiences for the learners throughout the formal educational process.

It is the responsibility of the teacher to assist in providing the ingredients for the learning experiences. The environment with which she is working will include the total community and not just the "school." When a learner selects an activity which interests him and becomes involved, he will be free to develop this interest to the extent he desires. From this initial experience, he indicates his own objectives. The teacher works with him in pursuing his own interests. The learner, as he internalizes understandings from the various experiences, develops a personal process of inquiry and learning which can continue throughout his life.

## Humanistic Curricula

Research relating to comparisons of various humanistic curricula was conducted by Seiler in 1972.3 Seiler selected the information processing theory of behavior as the model for his investigation. The researcher identified four commonalities in the information processing model as described by Newberg and Borton (1968) and Eiss and Harback (1969) and selected the following components as the classification system for his evaluation: (1) sensory modalities, (2) cognitive domain, (3) affective domain, and (4) psychomotor domain. His next step was to review the 1iterature of the Human Potential Movement to determine evaluative criteria for each of the four components on the basis of what the practitioners in the movement were attempting to achieve in each of the categories.

Seiler asserted that his review of the literature of the Human Potential Movement revealed that the movement is concerned with four aspects of the total human being and that "all four must be completely developed in order to maintain a fully functioning organism and that suppression or non-development of any of these could easily result in malfunctioning of the individual or at the least a sense of incompleteness. ${ }^{14}$ Therefore, the four domains were used as the evaluative criteria against which the five humanistic curricula were measured.
${ }^{3}$ Gary Darrell Seiler, "A Delineation of Evaluative Criteria Used in Comparing Five Humanistic Curricula" (unpublished Doctoral dissertation, University of Massachusetts, 1972).

$$
\text { 4Seiler, p. } 53 .
$$

The researcher described the four domains and their importance as follows:

Sensory: The senses receive the external stimuli. Learners should be made aware of the senses--touch, smell, sight, etc.

Cognitive: The cognitive elements include "the meaning making process, perceptual processes, self-concept and values." 5 These elements determine the translation done in mental activity.

Affective: This is the emotional response to the cognitive translation--understanding, acceptance, functions of one's emotions.

Psychomotor: This domain includes "the various aspects of overt expressive behaviors as they have been initiated by the affective domain-the ways emotions affect the body. "6

Seiler did not specify the method of selection used to determine the five humanistic curricula to be investigated, nor how he determined that they were "humanistic." However, he noted that this was a limitation of his study and that these five curricula were being described as they appeared in 1971. The curricula included in the study were: The Ford Psychological Curriculum, the Process-Concerns Curriculum, A Confluent Education Project, the Human Development Program, and the Achievement Motivation $n$-Ach Scheme. The fact that Seiler included only five specific programs that were labeled as "humanistic," and that these five were included because most of the other humanistic programs were still in the developmental stages, limits the generalizations which can be made.

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5^{5} \text { seiler, p. 33. }{ }^{6} \text { Seiler, p. } 44 .
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The researcher presented a verbal description of each of the curricula, which included background information on the development, the purpose, and the objectives of each of the curricula. Seiler then examined the stated objectives and the specific exercises included in each curriculum and compared and contrasted these on the basis of the four previously established components--Sensory, Cognitive, Affective, and Psychomotor.

In attempting to compare the five curricula with the criteria for a humanistic program, Seiler examined the actual stated objectives and exercises of each to determine if there were sensory objectives and exercises, cognitive objectives and exercises, affective objectives and exercises, and psychomotor objectives and exercises. The comparisons yielded the following conclusions: (1) there was a general lack of concern for the sensory modalities, (2) the cognitive domain was treated extensively by most curricula, (3) there was a general disregard for emotional elements, and (4) most of the curricula dealt with the psychomotor domain only in terms of overt behavior. ${ }^{7}$

Although Seiler developed a set of assessment tools which could be used to evaluate humanistic curricula, there is no evidence in the study to indicate that this model would be accepted by humanists as the basic model of the humanistic approach to education. The determination of whether or not the curricula were humanistic was based on whether or not they included stated objectives and exercises in each of the four

[^4]domains. Even though objectives and exercises are stated, this does not necessarily mean that the programs are humanistic. The total approach used by Seiler may be contradictory to the concept of humanistic education since he relied on pre-determined objectives and prescribed exercises as the evaluative criteria for his model.

The model presented by Seiler appeared to be appropriate for comparing various types of curricula, including those not labeled as humanistic. As noted, the researcher concluded from his examination that the cognitive domain was treated most extensively in each of the humanistic curricula investigated. It is likely that this would also be the conclusion if the same evaluative criteria were used to compare curricula not labeled as humanistic.

The usefulness of the evaluative criteria proposed by Seiler to compare and contrast curricula labeled as humanistic is questionable since it does not appear to provide a method for discriminating between the specific characteristics of a humanistic and a non-humanistic curriculum. If a comparison of the two types of curricula were made, on the basis of the model presented by Seiler, it is feasible that very similar results would be revealed.

## review of literature pertaining to the effects of the HUMANISTIC CONCEPT ON TEACHER AND LEARNER BEHAVIOR

Broudy pointed out that the teaching situation can be placed on a continuum from open to closed. The "open" teaching situation provides
more freedom, while the "closed" situation consists of a pre-determined response. 8

Zaret, in 1967, conducted an exploratory study to determine if classroom interactions could be identified, categorized, and analyzed in terms of an opening/closing process continuum. The rationale for the study was as follows:

1. The teacher is the major agent of influence in the classroom.
2. Every teacher develops expectations regarding learner behavior; these expectations may be general or specific; these expectations may be explicitly or implicitly defined and expressed by the teacher.
3. The teacher continually makes decisions which are compatible with his expectations for learner behavior, and which have a decisive effect on the course of action and interaction in the classroom.
4. Any area of teacher decision-making may be examined for fuller understanding, within a consistent and comprehensive framework of analysis. 9

The study included only verbal behavior in the classroom and
focused on the question-answer-response flow of verbal behavior. The basic assumption was that the teacher's response to a learner's answer was the determining factor in stimulating or limiting productive learner
${ }^{8}$ Harry S. Broudy, B. Othanel Smith, and Joe R. Burnett, Democracy and Excellence in American Secondary Education (Chicago: Rand McNally and Company, 1964), p. 106.
${ }^{9}$ Esther Schwartz Zaret, 'Differentiating Teaching Behavior From A Humanist Existential Perspective" (unpublished Doctoral dissertation, The University of Wisconsin, 1967), p. 80.
behavior. Zaret defined and classified teacher response behavior as transaction-oriented--accepting and expanding the learner's response-and role-expectancy oriented--rejecting the learner's response. "Productive learner behavior is characterized by evaluative and divergent responses; reproductive learner behavior is characterized by cognitive memory and convergent responses. "10 The following diagram represents the relationship between teacher behavior and learner behavior. 11


Closing
*Monitoring--calling on a student to respond; recognizing a volunteer. *Chairing-akeeping a discussion going; no teacher talk.

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10_{\text {Zaret, p. }} 84 . \quad 11_{\text {Zaret, p. }} 78
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Nine teachers, and their classrooms, from the Campus Elementary School of the University of Wisconsin--Milwaukee made up the sample for the study. The investigator visited each of the classrooms during the planning and discussion period in the Social Studies program for a period of twenty to twenty-five minutes. Tape recordings were made during each visit and the tapes were subsequently transcribed and analyzed on the basis of the pre-determined analytical framework of verbal behavior.

The major focus of the analysis was on critical incidents which Zaret defined as "those verbal behaviors which effect a change or shift in the flow of verbal interactions. ${ }^{12}$ The researcher identified critical shifts as "the completion of the unit of behavior-a reorientation of the flow of classroom verbal action. "13 The shifts were primarily the result of decisions made by the teacher.

The reliability of the categorizing process was checked by having two trained independent observers identify critical shifts and verbal behaviors. It was hypothesized that if two independent observers achieved significant agreement, the category system could be considered for analysis of classroom verbal interactions. However, as noted below, only one independent observer classified critical shifts and one verbal behavior and the specific reliability of neither was stated by the researcher.

In determining the reliability of identifying critical shifts in verbal behavior, the nine transcripts were analyzed by the researchers and three were randomly selected and submitted to a trained observer. The percentage of agreement (method of computation was not indicated) on

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\text { 12Zaret, p. 82. 13Zaret, p. } 82 .
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critical shifts between the researchers and the trained observer was 90 percent-of the 55 identified critical shifts, the observer and the researchers agreed on 50.

To determine the reliability of categorizing teacher and learner verbal behaviors, on the basis of opening and closing characteristics, the nine transcripts were analyzed by the researchers and a trained observer then analyzed the first page of each transcript and categorized the verbal behaviors. Agreement between researchers and the observer was reached on 141 out of 174 statements, or on 81 percent of the verbal behaviors. The researchers considered the levels of agreement high enough to state that critical shifts could be reliably identified and that verbal behaviors could be reliably categorized by the system utilized.

The complete analysis of the transcripts included the following steps:

1. The verbal behaviors were categorized as question-answer-response and in terms of student or teacher. Within each category, the verbal behavior was classified in the descriptive terms of the analytical framework.
2. Critical incidents were identified.
3. The flow of verbal behavior between critical incidents was examined in terms of the opening/closing continuum. 14

The transcripts were analyzed to determine the kinds of teacherlearner transaction patterns. The major question to be answered was 'Does closing (or opening) behavior on the part of the teacher result in reproductive (or productive) behavior on the part of the learner?'l5

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14 \text { Zaret, p. } 91 . \quad 15 \text { Zaret, p. } 93 .
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There were 147 shifts, covering both combinations--closing-reproductive and opening-productive. Of the 147 shifts identified in the transcripts, congruence was found in 127 instances of teacher and learner behavior and a lack of congruence in 20 instances. Through the application of the sign test, it was determined that the ratio 127-20 could occur by chance only one time in a thousand (. 001 level of significance). ${ }^{16}$

Zaret emphasized that to determine the validity of the model, a much broader demonstration would be necessary. Although the study was exploratory and limited, the classification scheme did appear to be useful for analyzing and classifying teaching and learning behaviors in terms of the opening and closing continuum. 17

The study of verbal classroom interaction conducted by Zaret provides a great deal of information which could be useful for future studies. The most important factor is that Zaret demonstrated that there are definite verbal behaviors of the teacher and the learner in the humanistic and the traditional classroom which can be identified and classified. Zaret also presented an analytical framework of terms which described teacher and learner behavior in each of the two approaches to teaching. She demonstrated that a particular type of teacher verbal behavior is likely to receive a particular type of learner response. On the opening and closing continuum, opening teacher behavior, such as stimulating, clarifying, and accepting, receives a learner response such as discovering, elaborating, and synthesizing. Closing teacher behavior, such as directing, judging, and rejecting, receives a learner response

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\text { 16Zaret, p. 94. 17Zaret, p. } 99 .
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such as confirming, following, and reproducing facts. This study has made a concrete step in demonstrating that there is a difference in the types of verbal teacher and learner behaviors in the humanistic classroom when compared to a more conventional classroom.

In the present study, the descriptive terms provided by Zaret were beneficial to the participating teacher and the researcher in describing the behaviors that actually occurred in the two classrooms included in the study.

In 1971, Mortimer conducted a study which involved the development of a revised or adapted curriculum and the assessment of the curriculum in terms of the conventional goals of a Language Arts program. 18

All the seventh grade students in the particular school used in the study had been randomly assigned to one of eight sections. Three teachers, two with three sections and one with two sections, had been assigned to teach the classes. One of the three-section teachers volunteered to participate in the study. The subjects for the study consisted of the 86 seventh grade students assigned to this teacher. Of her three sections, two were arbitrarily assigned as treatment groups and one as the control group. By using the same teacher in all three sections, the teacher effect was controlled.

[^5]The study focused on comparing the effects of two instructional treatments in the area of Language Arts. The adapted curriculum, developed by the researcher, was used in the two experimental classrooms and Gargiulo's (1970) "open classroom" concept was used in the control classroom.

In the experimental groups, there was no set pattern of instruction. A variety of learning activities were made available in the classrooms. During the first month, the students experienced difficulty in developing their own activities. However, in October, the students began to work out many activities themselves and enthusiasm grew. The control group followed the more conventional reading group approach. The evaluation of achievement in Language Arts was measured by the SRA Achievement Series Multilevel Edition and The Durrell Analysis of Reading Difficulty. The Slosson Intelligence Test was administered and the scores used as covariates for the statistical analysis.

The researcher pointed out that data concerning gains in reading, listening, and Language Arts failed to identify significant differences in the expeimental groups and the control group at the .05 level but consistently confirmed differences at the . 10 level. An analysis of covariance with $I Q$ scores as the covariate was used. Traditional tests in reading ability, listening, and Language Arts were used to measure achievement. The investigator (Mortimer) and the teacher interpreted the results to mean that the adapted curriculum "produced results in achievement which were at least as good and perhaps better than the conventional curriculum."19

19Mortimer, p. 98.

Attitude measurement included the use of a questionnaire designed by the researcher and administered orally to each student. A different form of the questionnaire was used for the pre- and post-test. An attitude test was also designed by the investigator. This was a paper and pencil test administered to the students as a group. This test was administered in November and in April. The test included items relating to attitude toward school, attitude toward self and others, and attitude toward self. The Pearson Product Moment Correlation Coefficient was used to test the relationship among items. "The r's derived from the analysis suggested very low correlation among single items. The approximate correlation was -0.200 to +0.275 on all but items 1 and 2 which were considered distractors. "20 The attitude test was validated against the pre- and post-questionnaires.

The students in the Experimental groups demonstrated more positive attitudes toward school and others when compared with the control group. Chi-square analyses of responses produced values which supported a significant difference in attitude at the .05 level.

The parts of the attitude test related to attitude toward school and attitude toward self and others were also administered to the total seventh grade population of the school. Chi-square analyses were performed to compare the responses of the Experimental groups and the total seventh grade. The following values were obtained: $X^{2}=25.95, \mathrm{df}=3$, $p=.001$ for attitude toward school and $X^{2}=12.41, d f=3, p=.01$ for attitude toward self and others. 21 It was concluded that the Experimental

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\text { 20Mortimer, p. 52. 21 Mortimer, p. } 93 .
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treatment did have positive effects on attitude toward school and attitude toward self and others.

The attitude post-test questionnaire yielded the following significant Chi-square value: Stated Attitude Toward School, Experimental versus Contro1: $X^{2}=26.70, p=.001 .^{22}$

Even though the gains in achievement were not significantly different, the researcher and the teacher concluded from student written responses to a reaction questionnaire that there was a more positive attitude and increased motivation in the Experimental classrooms when compared to the student responses relating to the more conventional approach.

Although the study conducted by Mortimer compared differences in achievement and attitude for two student-centered experimental groups and an "open classroom" group, the results do have implications for the present study. The fact that no significant differences were found in achievement is not unusual because the literature revealed that the major advantage of the student-centered or "humanistic" approach is in retention of knowledge. Perhaps if a follow-up had been conducted at a later date, there would have been differences in student achievement. The significant results in attitude change in the experimental groups are promising for the writer's study. The overall goal of a humanistic approach is to provide an environment that will produce achievement at least comparable with the more conventional approaches and at the same time develop more positive student attitudes toward school and self.
${ }^{22}$ Mortimer, p. 94.

In 1972, Rubenstein ${ }^{23}$ designed a study to determine if teachers' behavior could be changed through the use of a humanistic approach and a social-modeling approach to altering teacher verbal behavior and if students could perceive the change. The two groups, humanistic and socialmodeling, were to be compared to their own controls and to each other.

The verbal behaviors of openness and helping which were focused upon in the study were defined by Simon and Agazarian (1967) as follows:

## Openness

"Personal Sharing: Personal information about likes, dislikes, happenings or events that are 'close to' the person; personal descriptions of 'How I feel-What I want' in relation to the topic or task.

Maintenance Give: Giving personal information about oneself either in response to a question or as an unsolicited remark."

## Helping

'Maintenance Question: Questions which help a person clarify his feelings about matters very meaningful to him.

Maintenance Support: To strengthen by additional assistance, material, or supporting a person and informing him the 'MS speaker' understands how the listener feels.

Maintenance Joke: Something said or done to provoke laughter. Maintenance jokes are good natural jests supporting another person or the group. They are nondefensive, non-hostile, non-critical."24
${ }^{23}$ Alice Rubenstein, "The Effect of Social-Modeling and Humanistic Group Procedures Upon Teacher Classroom Behavior and Student Perceptions" (unpublished Doctoral dissertation, The University of Rochester, 1972).

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24 \text { Rubenstein, pp. 21-22. }
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The researcher contacted four elementary school principals from schools of similar size and socio-economic status which were located in the same suburban school district. The proposed program was explained and a time was arranged for the experimenter to meet with the total faculty and present the program. The program was presented as a fourday workshop to help teachers become more open and helpful in the classroom. "Seven volunteer teachers from each school were randomly assigned, as a group to either $E_{1}$ (social modeling) or $E_{2}$ (humanistic) conditions and three teachers (in two schools) and four teachers (in two schools) were assigned to control conditions. The 42 teachers had self-contained classrooms." 25 A random sample of six students from each teacher's classroom was selected by using a table of random numbers and class rolls. The group leaders were male graduate students with experience in group work.
$E_{1}$ groups received Treatment $A$ (social modeling) while $E_{2}$ groups received Treatment $B$ (humanistic). There were four treatment days, two days per week, in a period of two consecutive weeks.

Treatment A groups were shown a video-tape, 17 minutes in length, in which a model demonstrated the role of a teacher displaying open and helpful behaviors (as previously defined). The tape was accompanied by a written description of what behaviors were being displayed.

Treatment B (humanistic) consisted of a group procedure utilizing techniques of client-centered encounter or $T$ groups. The members controlled the content and direction of the meetings, with the leader

[^6]guiding toward content related to becoming more open and helpful. The group members talked about internal feelings about themselves as contrasted with Treatment A where behaviors were presented externally.

Following the conclusion of the treatment groups, a tape recording was made of each teacher's verbal behavior in his own classroom. The recording was analyzed according to Simon and Agazarian's Sequential Analysis of Verbal Interaction, using those parts specified as openness and helping. The tapes were rated by two independent observers. A frequency count of total number of open and helpful statements made by the teacher was taken. The raters' correlation was . 89 (Pearson r). 26 Each teacher also made a self-report of self-growth by using Shostrom's Personal Orientation Inventory.

Student perception of teacher behavior was assessed through the semantic differential technique. The semantic differential, developed by Rubenstein, was administered to a sampling of students from each subject's classroom.

A subjective evaluation questionnaire was given to the teachers at the conclusion of the study to determine their feelings toward the group and how they felt the group would help their personal and professional growth.

The groups were video-taped and were reviewed by two persons engaged in group work in social modeling and humanistic areas. The raters listened to portions of each of the taped sessions and then rated on a five-point scale (5 excellent, 4 very well, 3 good, 2 fair, 1 poor)

[^7]as to the tapes'adherence to the respective theoretical model (social modeling or humanistic). The social modeling groups received a rating of 4 and the humanistic groups received a rating of 4 . This rating indicated that the raters saw the tapes as following "very well" the respective theoretical models. The raters were also asked to rate whether they saw a difference in the two approaches. The "numanistic" rater gave the tapes a 4 (very different) and the social modeling rater gave the tapes a 3 (somewhat different). 27

The findings indicated that those teachers who received the humanistic group treatment did not differ significantly from their control group in the use of open and helpful verbal behavior in the classroom. Those teachers who received the social modeling treatment did not display a change in teacher open and helpful behavior in the classroom when compared with their control group. When treatments were compared to each other, there were no significant differences.

There was no significant overall effect upon student perception of change in teacher verbal behavior when comparing humanistic to controls, social modeling to controls and humanistic to social modeling. Rubenstein noted that in all the groups except one of the two social modeling groups there were no significant changes in teacher behavior. Therefore, the finding of no significant change in student perception was consistent with no significant change in teacher behavior in three schools. However, in the one school in which there was a significant teacher behavior change, the finding of no change in student perception

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{ }^{27} \text { Rubenstein, p. } 33 .
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was inconsistent. Rubenstein gave the following possible reasons for the lack of significant findings in this school:

1. Not enough time had passed for students to notice any differences in their teachers and reflect these on the semantic differential.
2. The teacher's change in verbal behavior was not noticed by the students.
3. The semantic differential instrument was not sensitive as an instrument for recording student perceptions.
4. The students did not respond accurately to the semantic differential.
5. What the students consider open and helping verbal behavior is not as this study defined it. 28

As noted, there were a few specific differences in the findings of the humanistic and social modeling groups. In one school using the social modeling treatment, it was determined that there was a significant effect on teacher open and helping behavior when compared with its control. The researcher stated that the differences could have resulted from the schools themselves, the types of teachers in the schools, and whether or not the teachers really volunteered to participate or were pressured. The teachers in the humanistic group, when compared to controls, indicated slightly more self-growth than those in the social modeling groups, compared to controls. When the social modeling and humanistic groups were compared to each other, there were no significant differences. 29

This study, as well as Zaret's, focused on verbal classroom behavior. Rubenstein determined that social modeling could perhaps be

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{ }^{28} \text { Rubenstein, p. 58. } \quad{ }^{29} \text { Rubenstein, pp. 54-56. }
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used effectively (in one group) to change teacher verbal behavior in the classroom and that the "humanistic" groups of teachers had a more positive feeling about themselves. There could be several reasons for the lack of significant differences found in this study. The treatment consisted of only four days and the classroom tapes were made one week following the conclusion of the group sessions; therefore, the treatments might not have had time to take effect.

The lack of significant findings in Rubenstein's study did not have specific implications for the writer's study because the study did not attempt to "train" teachers to change their verbal behaviors. Although verbal behavior does have an important effect on the climate of the classroom, and as Zaret demonstrated, can be classified as opening and closing, the humanistic approach involves much more than just verbal behavior. The organization of the activities, the role of the teachers and the learners, and the materials are all important elements of a humanistic approach.

## REVIEW OF LITERATURE PERTAINING TO THE STUDENT-CENTERED APPROACH IN THE AREA OF BASIC BUSINESS

A review of the literature pertaining to basic business revealed that a limited amount of research has been conducted in the area of instructional methodology. The majority of the research studies completed in basic business appeared to investigate "what is being done" rather than "what can be done."

Spidle, in 1963, conducted a study to investigate some of the techniques of teaching that might be applicable to a general business
class. Several techniques were selected and implemented in the basic business classroom in 1962-1963, and the effects of these techniques were evaluated. The major methods of evaluation included the teacher's observation and a student evaluation form. 30 Spidle presented the following conclusions:

1. The nature of the content to be taught must be considered when selecting a teaching technique. A variety of teaching techniques must be used to maintain the students' interests.
2. The maturity of the students seems to be significant in determining the teaching techniques to be used and in selecting the students to participate in the activities.
3. Most of the students preferred the teacher-led discussion rather than a student-centered activity; therefore, careful planning and teacher guidance will help create in students a desire for leadership in the class.
4. A teaching technique cannot be guaranteed effective in all situations. 31

In 1965, Sluder made a comprehensive investigation of the research studies in basic business completed prior to 1963. Sluder reported that "the unit plan and the textbook have been used frequently as guides to instruction and the discussion, project, lecture, and problem methods have been commonly used in teaching the course." 32 In

[^8]addition to the use of the textbook, Sluder stated that other instructional materials and activities included "films, field trips, reference materials, oral and written reports, bulletin boards, guest speakers, slides and filmstrips, business forms, illustrated notebooks, maps, charts and exhibits, and demonstrations."33

Crews, in a discussion of Sluder's findings, asserted that "a fundamental tenet of successful classroom operation is the need to provide a variety of ways to accomplish objectives." 34 He further indicated that

The research involving media for teaching general business, then, points to a continuing heavy emphasis on the textbook, but also to rapid development of supplementary aids. In the seventies, media could likely prove to be a prime factor in determining the place of general business in the secondary school curriculum. 35

During the 1968-69 school year, an experimental study was conducted in a suburban high school in Chicago. The purpose of the study was to compare the effectiveness of two approaches in teaching the oneyear general business course. The control group followed a traditional approach and used a textbook and a workbook as the methods and materials of instruction. The experimental group did not use a textbook or a

33James W. Crews, "The Teaching of General Business and Economic Education," Contributions of Research to Business Education, Ninth Yearbook of the National Business Education Association (Washington, D. C.: National Business Education Association, 1971), p. 94, citing Lester I. Sluder, "An Analysis and Synthesis of Research Findings Pertaining to General Business" (unpublished Doctoral dissertation, Indiana University, 1965), p. 118.

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{ }^{34} \text { Crews, p. 92. }{ }^{35} \text { Crews, p. } 94
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workbook. This group was presented a variety of instructional materials and teaching techniques. The same instructor taught both groups of general business students.

At the end of the school year, an opinionnaire of 60 statements relating to instruction in the general business course was administered to students in both classes. The students responded to the statements on the basis of the following choices: always, frequently, sometimes, seldom, and never. 36

The results of the opinionnaire were presented in relation to responses to the following three questions: 37

1. What role should students play in determining their educational experiences?
A. A majority of students in both groups wanted to participate at least sometimes in selecting their educational experiences. Seventy-one percent of the experimental group and 60 percent of the control group indicated that students should always, frequently, or sometimes choose what they want to study.
B. . . . when there is a degree of flexibility in teaching general business, there is a greater interest in the homework assignments and amount of extra work done by the students. Thirty-seven percent of the experimental group and only 7 percent of the control group indicated that they always, frequently, or sometimes did extra work in the general business class. Homework assignments were always, frequently, or sometimes interesting for 73 percent of the experimental group and 55 percent of the control group.
${ }^{36}$ Robert E. Nelson and Ruth B. Woolschlager, "Student Opinions Concerning Basic Business Instruction," Business Education Forum, XXVI (May, 1972), 47.

37Nelson and Woolschlager, p. \&7.
2. What were the reactions of students to classroom activities?
. . . The students in the experimental group were more interested in classroom activities than the students in the control group. Eighty-seven percent of the experimental group indicated that individual and group projects should always, frequently, or sometimes be used as compared to 55 percent of the control group.
3. Can students succeed in a classroom learning situation centered around something other than the textbook?
A. The results of four achievement tests in business and economic understanding given at the end of the experiment indicated that the mean scores for the experimental and the control groups were similar.
B. Seventy-one percent of the experimental group and 50 percent of the control group indicated that a course should seldom or never follow a textbook closely.
C. Fifty-two percent of the experimental group indicated that materials other than the textbook are always helpful in learning a subject as compared to 40 percent of the control group. 38

Nelson and Woolschlager asserted that "the opinions of the
experimental group students seem to support the position that some departure from the traditional textbook-workbook approach is justified and is probably a welcome change." ${ }^{39}$ They further stated that "a multimedia teaching approach can contribute substantially to building positive student attitudes toward the general business course, the high school business curriculum, and the business world." 40

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40}\mathrm{ Nelson and Woolschlager, p. 48.
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In 1970, Nelson conducted an experimental study in general business to determine "whether general business students could better learn and retain business and economic understandings through a multimedia teaching approach as compared with the traditional approach. 141 Two experimental classes using a multimedia approach and two control classes using a traditional approach were included in the study. Nelson found no statistically significant differences between the experimental and the control groups. He concluded "that students learn certain business and economic understandings equally well through the textbook-workbook approach or through the multimedia approach. 142 However, he stated that "the experimental group was more interested in the topics discussed and participated more in classroom activity. ${ }^{143}$

Although research in instructional methodology in basic business has been limited, many professional business educators and classroom teachers have expressed opinions and have proposed ideas and innovations applicable to basic business.

Price asserted that "one thing we can expect to see more of in the future . . . is student-centered classrooms. ${ }^{144}$ He further stated that "to maximize the transferability of what is learned, ideas should
${ }^{41}$ Robert E. Nelson, "A Comparison of Teaching Methods in General Business" (unpublished Doctoral dissertation, Northern Illinois University, 1970), cited by Dean R. Malsbary, "Basic Business Research Improves Instruction," Business Education Forum, XXVIII (March, 1974), 12.

42Malsbary, p. 12. ${ }^{43}$ Malsbary, p. 12.
44Ray G. Price, "Education for Economic Literacy--Projections for the Future," Business Education-An Evaluative Inventory, Sixth Yearbook of the National Business Education Association (Washington, D. C.: National Business Education Association, 1968), p. 192.
be presented in as many ways as possible. Teachers will not rely on a textbook as the only teaching tool. 145

In 1966, Musselman and Peeples asserted that
. . . the teaching of basic business subjects must employ a variety--in content, in teaching method, and in student activities. Both teachers and students must go far beyond the discussion contained in the textbook. Abundant reference materials are essential. Films, filmstrips, bulletin board exhibits, small discussion groups, committee and individual projects, library research, oral and written reports, and field trips are frequently used. The community serves as a source for speakers and as a laboratory for forms and interviews. 46

Again in 1972, Musselman emphasized that
Today's basic business classes tend toward active student participation, not memorization of information. Students are asked to share their opinions, interview parents and neighbors, explore the world of business, and carry through individual and group projects that help them learn from direct purposeful experience. 47

He further stated that "the daily newspaper, periodicals like Forbes,
Changing Times, Consumer Reports, and U. S. News and World Report have found their legitimate place in the basic business classroom. ${ }^{4} 48$

45Price, p. 192.
46 Vernon A. Musselman and Binford H. Peeples, "Business Education Contributes to the General Education of Secondary Youth," Business Education Meets the Challenges of Change, Fourth Yearbook of the National Business Education Association (Washington, D. C.: National Business Education Association, 1966), p. 264.

47Vernon A. Musselman, "Trends in Teaching Basic Business," Business Education Forum, XXVI (May, 1972), 23.

48Musselman, p. 23.

Price, Hopkins, and Duff, in discussing the basic business course of the past, indicated that

Methods, common but inappropriate, included the following: (1) textbook--students read the chapter and answered the questions at the end; (2) drill-arithmetic and spelling drills; (3) lecture--teacher dispensed the facts; (4) question-answer-teacher asked the questions, students gave the answers; and (5) paper and pencil projects-oprojects included such things as preparing and/or filling out forms. 49

Although these methods were described as basic business teaching methods of the past, these are basically the same methods that are found in many of the basic business classes of today.

Price, Hopkins, and Duff further stated that general business teachers are beginning to recognize the need for teaching and learning activities to be more student-centered rather than teacher-centered. They identified the following innovations which are being used by general business teachers today: simulation games, role-playing, multimedia packets, programmed learning, and "econologues" (dialogue relating to economic issues). 50 The authors also noted that

It appears that the role of the general business teacher of the future will be that of determining individual goals, arranging for a variety of materials and activities to help students achieve these goals, and arranging a learning environment in which students can become actively involved in the experiences expected to affect their behaviors. 51
${ }^{49}$ Ray G. Price, Charles R. Hopkins, and Thomas B. Duff, "Basic Business," Changing Methods of Teaching Business Subjects, Tenth Yearbook of the National Business Education Association (Washington, D. C.: National Business Education Association, 1972), p. 2.

50Price, Hopkins, and Duff, pp. 3-9.
51Price, Hopkins, and Duff, p. 10.

Although this statement specified that "the teacher will determine individual learning goals," which is not a part of the studentcentered approach as defined in this study, several of the ideas presented are applicable.

In his discussion of general business activities, Mott stated:
I do not advocate the nonuse of a basic textbook in the general business course because I definitely feel the students and teacher need a common ground. I do feel, however, that the teacher using just the textbook and none of the current materials available is short-changing the students. 52

Mintz presented the following creative activities to stimulate interest in basic business homework:

Explain to the students that they are free to develop the topic in any way they wish. They can write a poem, paint a picture, perform a brief skit before the class, compose and sing a song, cut pictures out of magazines and add individual commentary with each picture, construct a wooden or clay model, write a composition, or do anything else they feel inspired to do in developing some aspect of the assigned topic. ${ }^{53}$

He further explained that "the result will be increased interest in the subject and a better appreciation of the topic." 54

The importance of student involvement in the general business class is supported by Hopkins as follows: "Getting students actively involved in the learning process is the obligation of every general business teacher." 55

52Dennis L. Mott, "'Hands On' in General Business," Business Education Forum, XXVII (May, 1973), 52.

53Herman Mintz, "Stimulate Creativity in General Business," Business Education World, XXXXVIII (September, 1967), 8.

54Mintz, p. 9.
55Charles R. Hopkins, "Role-Playing and Sociodrama Provide Student Involvement," Business Education Forum, XXV (December, 1970), 54.

The literature revealed that professional business educators and classroom business education teachers are aware of and concerned about the problems encountered in the basic business course today. Through the implementation of some of the recommendations of these educators, the basic business course can feasibly be improved. Perhaps then, the basic business course will contribute to the education of all secondary school youth.

## Chapter 3

## METHODS AND PROCEDURES

The problem of this study, as indicated in Chapter 1 , was to develop a "student-centered" teaching plan for the Introduction to Basic Business course. This chapter will include a description of the subjects and design of the study, the materials and instruments used, and the statistical treatment of the data.

## SELECTION OF THE SAMPLE

The Introduction to Basic Business course is offered at the ninth or tenth grade level in the North Carolina public school system and is a non-required course in the business education curriculum. The subjects for this study consisted of two Introduction to Basic Business classes at Trinity Senior High School, Trinity, North Carolina, during the fall semester, 1974. One class was randomly designated as the "studentcentered" class and the other as the "traditional" class. Both classes were taught by the same teacher.

DESIGN OF THE STUDY

One class was randomly designated as the student-centered class and the other as the traditional class. A pre-test was administered at the beginning of the semester to all students in both classes. The student-centered class was conducted on the basis of the student-centered
approach; the traditional class was conducted in a more conventional manner. At the end of the semester, a post-test was administered to all students in both classes.

Several anthropological research techniques were employed during the semester in both classes. These data were collected for the purpose of providing an in-depth description of the actual classroom activities of the students and the teacher.

MATERIALS AND PROCEDURES

The materials and procedures for the student-centered and the traditional plans were specified and discussed individually. A description of the classroom organization, the learning environment, the materials and content, and the teacher and student activities for the student-centered class and the traditional class were presented in detail.

## Student-Centered Plan

The student-centered approach focuses on the learner as the major component in the educational process. The learner selects personal objectives which emerge from his own experiences. The teacher plays a supportive role (helping, listening, encouraging, participating) and the school and the comunity (including the home) provide the learning environment.

Prior to the beginning of the semester, the researcher prepared a list of topic areas to be covered in the Introduction to Basic Business course. This list was used as a general guide in determining the areas for which learning activities should be developed. The following topic
areas were included: The American Private Enterprise System, Business and the Consumer, Economic Risks and Insurance, Banks and Banking Services, Credit, Savings and Investments, Money Management and Budgeting, and Government, Business, and Labor. These are basically the topic areas recommended by the North Carolina Curriculum Guide and Courses of Study in Business Education. ${ }^{1}$

The researcher prepared a set of course goals for the Introduction to Basic Business course. A description of the course content, materials, organization, and activities was also prepared by the researcher.

Instructional materials. The instructional materials included textbooks, programmed materials, periodicals, reference books, paperback books, newspapers, and materials in each topic area collected by the teacher and the learners.

Classroom organization. The classroom was organized in activity centers relating to the topic areas. 2 The teacher had a desk or table. The activity centers were located throughout the classroom and outside the classroom in the community.

Activities. At the beginning of the semester, the researcher placed in the classroom a wide variety of learning activities in each topic area.
${ }^{1}$ North Carolina Curriculum Guide and Courses of Study in Business Education (Raleigh, N. C.: State Department of Public Instruction, 1963), pp. 38-42.
${ }^{2}$ James B. Macdonald, "Organizing Centers as Alternatives to Behavioral Objectives" (Greensboro, N. C.: The University of North Carolina at Greensboro, 1972), p. 4. (Mimeographed.)

The first few days of the semester were spent in exploration by the students in the various areas. The students selected their own activities which were of interest to them for their initial experiences.

Presentation of content. The lists of learning activities which were placed in the classroom by the researcher provided the initial experiences for the learners. As the student became involved in one area, he began to develop activities on his own, with another student, or with a group of students. Each student selected his own activity at any time he desired. Every student in the class could be involved in a different activity at any given time.

Teacher activity. The teacher played a supporting role in the classroom. She sometimes discussed a problem with one student, acted as a part of a discussion group with a group of students, presented her own experiences in a certain area, answered questions, helped a student with a project, or asked questions. The teacher became a member of the "learner" group.

Student activity. The students were not assigned to seats. There were seats available in the classroom and they could be moved into any arrangement desired. The students were free to move around the classroom as they wished, go to the library, go out into the community (this was pre-arranged because of administrative policies), work in groups, work individually, etc. The student selected any activity he wished, any time he wished, and developed his interest in an area as fully as he wished.

Learning environment. The learning environment consisted of the classroom, the entire school, the home, and the community.

## Traditional P1an

The traditional approach consisted of the use of one textbook, student reports, and the lecture and discussion methods of presentation.

At the beginning of the semester, the teacher distributed an outline of the topic areas to be covered in the Introduction to Basic Business course. The following topic areas were covered during the semester: The American Private Enterprise System, Business and the Consumer, Economic Risks and Insurance, Banks and Banking Services, Credit, Savings and Investments, Money Management and Budgeting, and Government, Business, and Labor. These are basically the topic areas recommended by the North Carolina Curriculum Guide and Courses of Study in Business Education. ${ }^{3}$

The goals for the course and the objectives for each individual topic area were specified by the teacher and given to the students. The researcher prepared a description of the course content, materials, organization, and activities and presented the details.

Instructional materials. The instructional materials consisted of a textbook and selected reference materials. Each student was given a textbook at the beginning of the semester.

Classroom organization. The classroom was organized with student desks and a teacher's desk in the front of the room.

[^9]Activities. The activities in the classroom consisted of reading from the textbook, exercises from the end of the chapters, and discussions and lectures. The students presented reports to the class. The subject area for the reports was assigned by the teacher. The major types of teacher activity were lecture and discussion.

Presentation of content. The teacher worked out a schedule for the entire semester. She presented the topics to the class in outline form. One to two weeks were devoted to each topic area. The same topic was presented to the entire class. Students were assigned the same exercises in the textbook, read the same material, and completed the same assignments on the same time schedule.

Teacher activity. The teacher used the lecture method to introduce each topic. The students were assigned a chapter for homework, the teacher discussed it in class the next day, and a list of questions for class discussion was presented.

Student activity. The students remained in their seats throughout the class period. As the teacher presented a new topic or discussed a familiar one, they asked questions and took notes. During the class discussion period, the teacher asked questions of the students. The teacher called on students to answer questions, but students could also volunteer to answer questions if they desired.

Learning environment. The learning environment consisted of the basic business classroom. This room included general reference materials.

Planned learning activity, other than assigned homework, took place only in the classroom.

## ANALYSIS OF DATA

The analysis of data included evaluative instruments for student achievement, student attitude, and student and teacher reaction.

## Student Achievement

Student achievement was measured through the use of a test published by the Joint Council on Economic Education. The test was designed to measure the student's understanding of personal economics and economic reasoning and consisted of 50 multiple-choice items. The pre-test, entitled "Test of Understanding in Personal Economics, 14 was given to each group at the beginning of the semester. The post-test (same as the pre-test) was administered to both groups at the end of the semester.

## Student Attitude

Student attitude was measured through the use of a semantic differential. 5 The semantic differential consisted of a group of selected concepts and relevant bipolar adjectives. The student indicated his feelings about each concept on the basis of a seven-point scale.

[^10]The specific concepts rated in this study included the following: Community, School, Basic Business Course, Basic Business Classmates, Learning, Teaching, and Me (self). These particular concepts were selected because of their relevance to the research problem-attitude toward school, basic business, self--and because they are likely to receive a wide variety of responses. As Kerlinger stated, "one of the general requirements for the selection and use of concepts is that they must elicit varied responses from different individuals." 6

An appropriate set of scales, or bipolar adjectives, was selected which was applicable to the stated concepts. A seven-point scale was used. The scales were representative of the Evaluation factor. Kerlinger noted that in studies of attitudes, scales of only the Evaluation factor are needed. 7 The scales included such adjectives and pairs as pleasant-unpleasant and good--bad. The bipolar adjectives were selected from Osgood's list of 50 scales which have been empirically tested. ${ }^{8}$ The adjective pairs were selected on the basis of the Evaluation factor and relevance to the concepts.

The semantic differential was administered to both classes four times during the semester.

[^11]
## Student and Teacher Reaction

A reaction questionnaire was given to both classes and to the teacher at various points during the semester. This was an informal device to obtain a written reaction to the Introduction to Basic Business course and the activities involved in the course. The general format of the questionnaire was open.

## Anthropological Research Methods

Due to the nature of the study, several methods appropriate to the field of anthropological research were utilized, including (1) observation, (2) interviewing, (3) journalizing, and (4) selected case studies.

## Statistical Treatment

The data collected on student performance were analyzed through the analysis of covariance (one-way) with the pre-test score as the covariate.

Student attitude was analyzed through the use of an analysis of covariance with repeated measures (two-way). The pre-test score was identified as the covariate.

## Chapter 4

## BACKGROUND INFORMATION

The background information is presented as a description of the community, the school, the students and the teacher, and the arrangements made prior to the study.
dESCRIPTION OF THE COMMUNITY

Trinity, North Carolina, is a small suburban community with a population of approximately 2,100. The area is fairly industrialized with a number of furniture-related factories and plants. Although there are limited employment opportunities in the community itself, many of the residents are employed by furniture industries in the adjacent city of High Point. Several textile manufacturing firms in the surrounding area provide additional employment.

The economic status of the community ranges from high- to lowincome with the majority of the families in the low-middle to middle income group. In general, the community is composed of working-class families.

DESCRIPTION OF THE SCHOOL

Trinity Senior High School is located in Trinity, North Carolina. The school serves a senior high school population (grades 10-12) of approximately 800 students. The administrative and academic personnel
include a principal, a part-time assistant principal, one guidance counselor, and 37 teachers.

The school is departmentalized with a basically traditional philosophy. However, the principal is receptive to innovative ideas proposed by the faculty and students.

The Business Education Department offers the business courses generally found in a business education curriculum. There are four business education teachers, each with a particular area of interest and some degree of specialization. During the $1974-75$ school year, 382 students are enrolled in 18 courses offered by the Business Education Department.

## DESCRIPTION OF THE COURSE

The Introduction to Basic Business course is offered as an elective at the tenth-grade level. However, eleventh- and twelfthgrade students may also enroll in the course. Statistical data for the past five years, presented in Table 1 , reveal the status of the Introduction to Basic Business course. As indicated by the figures, the course has not been popular among students or teachers.

Table 1

## Enrollment Figures for Introduction to Basic Business

| Year | No. of <br> Classes | No. of <br> Teachers | No. of Students <br> Enrolled |
| :--- | :---: | :---: | :---: |
| $1969-70$ | 3 | 1 | 105 |
| $1970-71$ | 2 | 1 | 70 |
| $1971-72$ | 3 | 2 | 85 |
| $1972-73$ | 3 | 1 | 85 |
| $1973-74$ | 1 | 30 |  |

The Introduction to Basic Business Course is rotated among the four business education teachers on a yearly basis. Interviews with the teachers revealed that they are not interested in teaching the course and are willing to do so only when it is assigned. Some of the reasons given for this disinterest were: (1) the majority of the students are in the "low-ability" group, (2) the students are not interested in the subject matter, (3) the "troublemakers" are assigned to the course and create discipline problems, and (4) the course is not interesting to teach.

## ARRANGEMENTS FOR THE STUDY

The purpose of this study, as stated in Chapter 1, was to design an alternative plan for the course, Introduction to Basic Business, and to compare its effectiveness with a traditional plan on the basis of
student achievement and student attitude. The two Introduction to Basic Business classes at Trinity Senior High School were selected for participation in the study because both classes were to be taught by the same teacher. By holding the teacher variable constant, the measurement of achievement and attitude should reflect only the effectiveness of the methods and materials employed in each of the two classes.

During the summer of 1974 , the investigator met several times with the principal and the teacher to discuss the proposed teaching approaches. The principal indicated an interest in the plan and gave his approval for its implementation with the beginning of the fall semester. The teacher appeared to be enthusiastic about the plan but did indicate some reluctance and hesitation at various times during the final stages of preparation.

As the final preparations for the student-centered and the traditional classes were being made, the teacher expressed enthusiasm and confidence. However, the remaining members of the Business Education Department did not appear to be convinced that the student-centered plan would be a workable approach. All of the members of the department did voluntarily submit supplementary materials for the student-centered classroom, which indicated a positive attitude.

## Education and Experience of the Teacher

Mrs. Carol Gibson was the teacher assigned to the Introduction to Basic Business classes for the 1974-75 school year. Mrs. Gibson received a Bachelor of Science degree in business education from East Carolina University in 1964. She has been a member of the Business Education

Department at Trinity Senior High School for the past eight years. During this period, Mrs. Gibson has taught the Introduction to Basic Business course three times.

## Designation of Classes As StudentCentered and Traditional

The two Introduction to Basic Business classes at Trinity Senior High School were composed of students who had elected the couse in the spring semester of 1974. The total number of students electing the course had been assigned, by a computer process, on the basis of class schedules and other administrative procedures to one of the two classes. Therefore, the students were not randomly assigned; the two classes were accepted as intact groups. No attempt was made to equate the two groups on the criteria of intellectual potential, previous scholastic achievement, or socio-economic background.

The two classes were scheduled for first period, 8:30-9:25 a.m., and third period, 10:33-11:31 a.m. Designation of the two classes as student-centered and traditional was made through the use of a table of random numbers. ${ }^{1}$ The first-period class was randomly designated as the traditional class and the third-period class as the student-centered class. Since both classes were scheduled in the morning hours, the time element was not considered as significant.

[^12]
## Description of Students

Approximately fifty students had elected to enroll in the two Introduction to Basic Business classes. On August 1, 1974, the computer printout listed twenty-four students in each of the two classes. Each class consisted of a combination of sophomores, juniors, and seniors.

Various personal and academic characteristics of the two groups of students are presented in Table 2. These data are included for informational purposes to present a more specific description of the students who participated in the study.

Table 2

Personal and Academic Characteristics of Both Classes

| Characteristic | Traditional Class | StudentCentered Class |
| :---: | :---: | :---: |
| Number of Students | 20 | 23 |
| Mean Age | 16.6 | 16.7 |
| Mean $1 Q^{\text {a }}$ | 95.85 | 97.47 |
| Sex - Males/Females | 10/10 | 13/10 |
| Classification (Sophomore/ Junior/Senior) | 11/2/7 | 7/14/2 |
| aThe measurement instrument was the California Short-Form Test |  |  |
| of Mental Maturity, Level |  |  |

## DEVELOPMENT OF THE STUDENT-CENTERED AND TRADITIONAL PLANS

During the 1973-74 school year, the investigator developed a tentative design for the student-centered and the traditional Introduction to Basic Business classes. The initial step was to determine the overall goals for an introductory course in basic business. The North Carolina Curriculum Guide and Courses of Study in Business Education ${ }^{2}$ was the major reference for the goals recommended for the course. Several additional sources were also consulted or reviewed and a list of general goals for the course was developed. (See Appendix A.)

The determination of the general goals led to the selection of the topic areas appropriate for the course. Eight specific topic areas were identified as follows: (1) The American Private Enterprise System, (2) Government, Business, and Labor, (3) Business and the Consumer, (4) Economic Risks and Insurance, (5) Banks and Banking Services, (6) Credit, (7) Savings and Investments, and (8) Money Management and Budgeting. These are basically the topic areas recommended by the North Carolina Curriculum Guide.

The designs for the student-centered plan and the traditional plan were identical through this initial stage of development. After the identification of the general goals and the selection of the topic areas, the research focused attention on the teaching methods and the materials for each plan.

[^13]
## Traditional Plan

In order to insure that the traditional class would be conducted in a specific manner, it was necessary to prepare a detailed design. As indicated in Chapter 1 , the traditional plan consisted of the use of textbooks, lectures, exercises, discussions, and examinations as the basic instructional methods and materials.

The researcher prepared a teacher's manual for the traditional class. (See Appendix B.) The manual included the overall goals for the course in Introduction to Basic Business, the selected topic areas to be included, specific objectives for each topic area, and the instructional materials to be used to achieve these objectives. A description of the classroom organization, the teacher activity, the student activity, and the learning environment was presented in detail in the manual.

The general procedure for presentation of the topic areas was specified as follows: (1) the teacher introduced each topic area and corresponding chapter to the entire class using the lecture method, (2) the objectives for the topic area were distributed to the students,
(3) the teacher assigned questions at the end of the chapters, and
(4) the teacher and the students discussed the answers to the assigned questions. Although the specific topic areas, the objectives, and the textbook chapters were selected by the researcher, in cooperation with the teacher, the daily classroom activities, such as exercises, discussions, assignments, and reports, were left to the discretion of the teacher.

The state-adopted textbook, General Business for Everyday Living, ${ }^{3}$ was the major resource for the traditional class. The researcher, with the cooperation of the teacher, selected specific chapters to be covered in each of the topic areas. This list was included in the teacher's manual.

Evaluation instruments for the traditional class were also indicated in the teacher's manual. The primary method of evaluation for grading purposes was a uniform test to be administered at the end of each unit of instruction or topic area. Specific measurement devices for research purposes were identified.

## Student-Centered Plan

The design for the student-centered plan required a detailed description of the instructional procedure, the development of initial learning activities, the collection of a large variety of resource materials, and the organization of learning activity centers for each topic area. As defined in Chapter 1, the student-centered approach focuses on the learner as the major component in the educational process. The learner determines his own objectives in each topic area and the teacher plays a supporting role.

After the topic areas for the Introduction to Basic Business course had been determined, the researcher developed initial learning

[^14]activities (see Appendix C) for each of the topic areas. These initial activities served as a stimulus or a "starting point" for the students In each topic area. The activities for each area covered a wide range of ability levels. Approximately $10-15$ initial activities relating to each area were prepared. The researcher used a number of resources, such as teachers' manuals, periodicals, and monographs, in developing the activities.

Learning activity centers for each topic area were developed. The centers consisted of a table for each area with a variety of supplementary materials and books related to the specific topic. The initial learning activities for the topic area were placed in the learning activity center. There were eight learning activity centers in the student-centered classroom. The tables were placed around the classroom and were identified by topic name.

A teacher's manual was prepared for the student-centered plan. (See Appendix D.) The manual included the overall goals for the course, the specific topic areas to be included, and the instructional materials to be placed in the classroom. A description of the classroom organization, the teacher activity, the student activity, and the learning environment was presented in detail in the manual.

The general classroom procedure involved the activities of the students. The procedure was presented in the teacher's manual as follows: (1) exploration of all topic areas by the student to select a beginning point, (2) selection of topic area of interest, (3) reading of textbook chapters and supplementary materials to obtain an overview of the topic area, (4) selection of an initial learning activity or some
other area of inquiry in the topic area, and (5) preparation of a student contract indicating the proposed activity and the proposed method for reporting the activity. The students were free to explore all topic areas before making a definite selection for study and were free to select any of the eight topic areas they desired for their initial experience.

The state-adopted textbook was used as one resource in the student-centered class. The textbook was used to provide an overview of the topic area for the student. Specific chapters were not indicated and the students were not given topic objectives. The students determined their own objectives for each topic area.

In addition to the textbook, the researcher arranged for a daily subscription to a newspaper for the student-centered class. Other supplementary materials included paperback books, supplementary textbooks, reference books, simulation games, programmed materials, periodicals, and specific supplementary materials in each topic area. The researcher, the teacher, and the students collected additional materials to be placed in the activity centers as the semester progressed.

One important aspect of the student-centered plan was the learning environment. The students were able to pursue their interests and related activities in the classroom, the school, and the community. The researcher secured the approval of the principal for a Student Pass (see Appendix E) to be used by the student when it was necessary to go into the community to pursue an activity. The students were allowed to leave the school during the class period by completing a Student Pass and obtaining the necessary signatures.

The methods for evaluation in the student-centered class were also presented in the teacher's manual. The primary method was teacher and student discussion of each activity as it was completed and reported. The teacher and the student discussed the grade and a mutually agreed upon grade was recorded for the activity. Additional evaluation devices included achievement and attitude measurement for research purposes. There were no uniform tests in the student-centered plan.

FIRST WEEK: TRADITIONAL AND STUDENT-CENTERED CLASSES

## Traditional Class

On the first day of class nineteen students were in attendance. Six students had dropped the course because of scheduling conflicts. One additional student had enrolled in the first-period class.

The teacher distributed textbooks, a list of topic areas to be covered, a list of overall course goals, a list of objectives for each topic area, and a list of chapters corresponding to each topic area. She explained the general procedure to be followed throughout the semester.

Several students asked about testing and grading procedures. The teacher explained that there would be a uniform test following the completion of each topic area and explained the point grading system which would be employed.

The researcher had supplied composition books to be used as journals by the students. The teacher explained that the students were to write a description of their feelings about the Introduction to Basic Business course, their feelings about school, and their likes and dislikes in the journal on a daily basis or upon completion of each topic area.

The students were told that the journal comments would have no effect on their grades.

The teacher discussed the course goals and assigned the first topic area for the next day. The students were given the remainder of the class period to begin reading the assignment.

Several days after the semester began, one student dropped the Introduction to Basic Business course because she wished to have one class period as a study hall. Two additional students enrolled in the first-period class, making a total of twenty students.

The researcher attended the traditional class as an observer every day during the first two weeks of the semester. She then attended the class at least two days per week for the remainder of the first semester.

The remaining days in the first week included the introduction of the first topic area by the teacher through the use of the lecture method. Questions and exercises at the end of the chapter were assigned and were discussed in class on the succeeding days.

## Student-Centered Class

On the first day of class twenty-four students were in attendance. Three students whose names appeared on the original class roll had dropped the course because of scheduling conflicts and three additional students had enrolled in the course.

The teacher explained to the students that a new or different teaching approach was going to be implemented in the class. She gave a detailed explanation of the procedure that would be followed and of the
role of the students and the teacher. The list of overall goals for the course, textbooks, and a list of topic areas were distributed to the students.

In explaining the procedure for the student-centered class, the teacher distributed several Student Contract forms and several Student Pass forms to each member of the class. An example demonstrating the use of each was presented. The use of the textbook and the supplementary materials, the learning activity centers, the initial learning activities, and the procedure for the first few days were discussed in detail. The method of student and teacher evaluation was also explained.

The researcher had supplied composition books to be used as journals by the students in the student-centered class. The teacher explained that the students were to write a description of their feelings about the Introduction to Basic Business course, their feelings about school, and their likes and dislikes in the journals on a daily basis or upon completion of each topic area. The students were told that their journal comments would have no effect on their grades. The students were given the remainder of the class period for exploration of the various activity centers.

The researcher and the teacher were apprehensive about how the students would react to the freedom given in selecting a topic area and in working completely on their own. Previous research ${ }^{4}$ indicated that

[^15]in one similar study with a group of third-grade Language Arts students, the first two months had been disappointing to the researcher and the teacher because nothing seemed to be accomplished by the students. However, in the student-centered Introduction to Basic Business course, every student had selected a topic area and had completed a student contract by the end of the third class meeting.

The investigator attended the student-centered class as an observer every day during the first two weeks of the semester. She then attended the class at least two days per week for the remainder of the semester. The students continued to work on individual activities during the remaining days of the first week.

## CLASSROOM ENVIRONMENT AND STUDENT ACTIVITY

The classroom environment and the student and teacher activity in the two Introduction to Basic Business classes were completely different. The following presentation describes the atmosphere and structure of each of the two classes and demonstrates the differences in student and teacher activity.

## Traditional Class

The traditional Introduction to Basic Business class was held in a mathematics classroom. The student desks were arranged in rows, with the teacher's desk in the front of the classroom. There were no supplementary materials relating to the area of basic business in the classroom.

The classroom procedure in the traditional class was teacher-
directed and formal. The teacher sat at her desk in the front of the
classroom and lectured, asked questions, and answered questions. A seating chart was prepared by the teacher and distributed to the class members. The students sat in their assigned seats during each class period.

Each student was required to purchase a composition book for specific class notes and homework assignments. The teacher assigned the specific end-of-chapter exercises and activities relating to each topic area. These exercises were completed by all the students as homework or as a part of the daily class activity. After the assignment was made, the student was expected to complete it for the next class meeting. During the next class period, the students were asked individually to answer the assigned questions orally. The notebooks were collected by the teacher prior to each topic area test. Students who had completed all the assignments were given a check mark. If all assignments were not complete, the students were not given a check. At the end of the nineweek grading period, topic area test grades were averaged. Students completing all assignments in their notebooks were given three additonal points which were added to the ninewweek average. Students who did not complete all assignments in the notebooks had three points deducted from their nine-week average.

As an additional incentive, the teacher divided the class into five groups of four students each. On certain days, at the teacher's discretion, the groups were asked questions which had been previously assigned. On some occasions any member of the group was allowed to answer the question and on other occasions individual group members were
designated to answer. In both situations, if the question was correctly answered, all members of the group received a pre-determined number of points. The questioning was rotated on a consecutive basis throughout the five groups. If one group, or specific member, could not answer the question, it was rotated to the next group. At the end of the nine-week grading period, each member of the group with the highest number of accumulated points received an additional three points which were added to his nine-week average.

There was some dissatisfaction with the group-point system. Some students complained that some groups were given easier questions than others and that the procedure was unfair. However, the group-point system was continued throughout the semester.

The formal classroom atmosphere provided little interaction between student and teacher other than on a student-response basis. The teacher had total control over classroom procedure and student activity.

The researcher visited the traditional class two days per week after the first two weeks of the semester. There was no opportunity to talk with the students individually because the entire class period was planned by the teacher. When the teacher was not lecturing or asking questions, the students were given an assignment and were expected to work quietly and individually at their desks.

## Student-Centered Class

The student-centered Introduction to Basic Business class was held in a typewriting classroom. The typewriter tables were arranged in rows and the teacher's desk was in the front of the room. Eight learning
activity centers were arranged around the room. Each activity center was identified by name and contained the initial learning activities and the supplementary materials pertaining to the topic area. A miscellaneous reference section was set up in the front of the room.

Classroom procedure in the student-centered class focused on the students. Each day the students came into the room and bagan working on individual activities. Some students worked at the activity centers and others worked at the typewriter tables which they had selected. The teacher worked with individual students at her desk or at an activity center, or as a group member at the typewriter tables. Many students wished to present oral reports on their completed activities. During the class period, if a student wanted to make an oral report, he indicated this to the teacher whenever he was ready and she told the other class members. The students stopped their activities, remaining in whatever location they happened to be at the time, and listened to the report and asked questions or made comments. When the oral presentation was completed, the students resumed their prior activities.

On a given day, several students might be out of the classroom working on an activity. These students did report to the teacher and obtain her signature on a Student Pass. The students sometimes worked in the library or went out into the community to conduct an interview or collect information.

Around mid-semester, the teacher and the researcher decided to initiate a group activity. The plan (see Appendix F) was explained to the class as follows: (1) class members were to divide into eight groups of three students each, with students selecting their own group members,
(2) each group was to select one of the eight topic areas, and (3) then the group was to develop an original and creative activity to be presented orally to the entire class. The groups were given two class periods to develop their presentations. On the third day, the groups made their presentations on a voluntary basis. Three class periods were devoted to the group activities. The remaining class members were given evaluation sheets (see Appendix G) and the method for evaluation was explained. This group activity appeared to stimulate interest and enthusiasm in the entire class.

The researcher visited the student-centered class two days per week after the first two weeks of the semester. There were many opportunities for talking with the students in this class. The researcher asked questions and worked with individuals and groups throughout the semester. The atmosphere in the student-centered class was informal. There was constant activity by the students as they moved to the activity centers and to the reference table. At a given time, each student might have been working in a different topic area. Many of the activities resulted in charts, graphs, or posters which were displayed in the classroom.

## Chapter 5

## FINDINGS

As indicated in Chapter 1 , the problem of this study was to develop a student-centered teaching plan for the Introduction to Basic Business course. This chapter presents an analysis of the data, an interpretation of the findings related to each of the hypotheses, and a discussion of additional relevant data collected through interviews, journals, and observations.

Achievement and attitude data were collected from two Introduction to Basic Business classes at Trinity Senior High School in Trinity, North Carolina, A pre-test and a post-test were used in the measurement of achievement and attitude. The statistical technique employed in analyzing the data was the analysis of covariance. The pre-test score for each measurement was used as the covariate. The Statistical Analysis System Regression Program at the Triangle University Computer Center performed the statistical analysis.

## Student Achievement

Student achievement was measured through the use of a test published by the Joint Council on Economic Education. 1 The Test of Understanding in Personal Economics consisted of 50 multiple-choice items. The test was administered to both classes as a pre-test at the beginning

[^16]of the semester and as a post-test at the end of the semester. (See Appendix $H$ for pre- and post-test achievement scores.) The pre-test score was used as the covariate in performing the analysis of covariance.

The following hypothesis was investigated:
There will not be a significant difference in student achievement in the student-centered Introduction to Basic Business class when compared to student achievement in the traditional Introduction to Basic Business class.

The one-way analysis of covariance, ${ }^{2}$ as indicated in Table 3, yielded an F-ratio of .04703 , which was not significant at the .05 leve1. Therefore, the hypothesis regarding differences in student achievement in the two classes was accepted.

Table 3
Analysis of Covariance (One-Way) for Achievement

| Source | df | Sum of Squares | Mean Squares | F-Ratio |
| :--- | :---: | :---: | :---: | :---: |
| Treatment | 1 | .7814 | .7814 | .04703 |
| Within | 40 | 664.5204 | 16.6130 |  |
| Total | 41 | 665.3018 |  |  |

2B. J. Winer, Statistical Principles in Experimental Design, (2d ed.; New York: McGraw-Hill Book Company, 1971), pp. 755-781.

The adjusted post-test means, Table 4, were as follows: Traditional
Class ( $\mathrm{n}=20$ ), 22.6330; and Student-centered Class $(\mathrm{n}=23), 22.3626$.

Table 4
Adjusted Post-Test Means for Achievement

| No. of <br> Students | Class <br> Description | Adjusted <br> Means |
| :---: | :---: | :---: |
| 20 | Traditional | 22.6330 |
| 23 | Student- <br> centered | 22.3626 |

Student Attitude
Student attitude was measured through the use of a semantic differential developed by the researcher. The semantic differential was administered at the beginning of the semester as a pre-test (September 3) and three times during the semester on the following dates: October 22, December 12, and January 16. The pre-test rating score was used as the covariate with each of the three rating scores obtained during the semester. The rating scores on each of the seven concepts (Community, School, ${ }^{3}$ Basic Business Course, Basic Business Classmates, Teaching, Learning, and Me) were analyzed through the use of a two-way analysis of covariance with repeated measures. The two factors were as follows: (1) between subject factor (teaching plans), and (2) within subject factor ( $R$, repeated testing).
${ }^{3}$ The seven concepts were reviewed by several specialists in the area of research and measurement.

The following hypothesis was investigated:
There will be a significant difference in positive student attitude toward Community, School, Basic Business Course, Basic Business Classmates, Teaching, Learning, and Me (self) in the student-centered Introduction to Basic Business class when compared to student attitude in the traditional Introduction to Basic Business class.

Community. A two-way analysis of covariance with repeated measures yielded the results, summarized in Table 5, relating to student attitude toward the Community. The F-ratio between groups, . 0503, was not significant at the .05 leve1. An analysis of a difference in testing over both groups yielded an F-ratio of 5.9387 , which was significant at the .05 level. The analysis to determine if the two groups reacted in the same way as they progressed through the testings resulted in an F-ratio of 2.4463, which was not significant at the .05 level. The overall hypothesis relating to differences in student attitude toward the Community was rejected.

Table 5
Analysis of Covariance with Repeated Measures (Two-Way) for Community

| Source | df | Sum of Squares | Mean Squares | F-Ratio |
| :--- | ---: | :---: | :---: | :---: |
| Groups | 1 | .04488 | .04488 | .0503 |
| Subjects within groups | 40 | 35.69138 | .89228 |  |
| R | 2 | 2.9765 | 1.48825 | $5.9387 *$ |
| Groups x R <br> R X subjects within <br> groups | 2 | 1.2261 | .61305 | 2.4463 |
| Total | 82 | 20.5468 | .2506 |  |

*Significant at the . 05 level.

The adjusted means for all Community rating scores were as follows: Traditional Class ( $\mathrm{n}=60$ ), 5.4490; and Student-centered Class ( $n=69$ ), 5.0548. The adjusted means for both classes on the three tests are presented in Table 6.
Table 6
Adjusted Post-Tests Means (Both Classes)
for Community

| No. of <br> Students | Test No. | Adjusted <br> Means |
| :---: | :---: | :---: |
| 43 | 2 | 5.0984 |
| 43 | 3 | 5.1667 |
| 43 | 4 | 5.4493 |

The adjusted means for each class on the three tests are presented individually in Table 7.

Table 7
Adjusted Post-Tests Means (Each Class)
for Community

| No. of <br> Students | Traditional <br> Class | Student- <br> Centered <br> Class | Adjusted <br> Means | Adjusted <br> Mean <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 2 |  | 5.3278 |  |
| 20 | 3 |  | 5.4953 | +.1675 |
| 20 | 4 | 2 | 5.5238 | +.0285 |
| 23 |  | 3 | 4.8989 |  |
| 23 |  | 4 | 4.8811 | -.0178 |
| 23 |  |  | 5.3845 | +.5034 |

Schoo1. A two-way analysis of covariance with repeated measures yielded the results, summarized in Table 8 , relating to student attitude toward School. The F-ratio between groups, . 0211, was not significant at the . 05 level. An analysis of a difference in testing over both groups yielded an F-ratio of .8285 , which was not significant at the .05 level. The analysis to determine if the two groups reacted in the same way as they progressed through the testing resulted in an F-ratio of 1.3127 , which was not significant at the .05 level. The overall hypothesis relating to differences in student attitude toward School was rejected.

Table 8

Analysis of Covariance with Repeated Measures (Two-Way) for School

| Source | df | Sum of Squares | Mean Squares | F-Ratio |
| :--- | :---: | :---: | :---: | :---: |
| Groups | 1 | .01992 | .01992 | .0211 |
| Subjects within groups | 40 | 37.77418 | .94435 |  |
| R | 2 | .69850 | .34925 | .8285 |
| Groups x R | 2 | 1.10657 | .45329 | 1.3127 |
| R subjects within |  | 82 | 34.5669 |  |

The adjusted means for all School rating scores were as follows: Traditional Class $(n=60), 5.4015$; and Student-centered Class ( $n=69$ ),
5.4701. The adjusted means for both classes on the three tests are presented in Table 9.

Table 9
Adjusted Post-Tests Means (Both Classes) for School

| No. of <br> Students | Test No. | Adjusted <br> Means |
| :---: | :---: | :---: |
| 43 | 2 | 5.3409 |
| 43 | 3 | 5.4328 |
| 43 | 4 | 5.5309 |

The adjusted means for each class on the three tests are sumarized individually in Table 10.

Table 10
Adjusted Post-Tests Means (Each Class) for School

| No. of <br> Students | Traditional <br> Class | Student- <br> Centered <br> Class | Adjusted <br> Means | Adjusted <br> Mean <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 2 |  | 5.3689 |  |
| 20 | 3 |  | 5.4809 | +.1120 |
| 20 | 4 | 2 | 5.3549 | -.1260 |
| 23 |  | 3 | 5.3353 |  |
| 23 |  | 4 | 5.3910 | +.0557 |
| 23 |  |  | 5.6840 | +.2930 |

Basic business course. A two-way analysis of covariance with repeated measures yielded the results, summarized in Table 11 , relating to student attitude toward the Basic Business Course. The F-ratio between groups, .0712, was not significant at the .05 level. An analysis of a difference in testing over both groups yielded an F-ratio of 1.5616 , which was not significant at the .05 leve1. The analysis to determine if the two groups reacted in the same way as they progressed through the testing resulted in an F-ratio of 1.5225 , which was not significant at the .05 level. The overall hypothesis relating to differences in student attitude toward the Basic Business Course was rejected.

Table 11
Analysis of Covariance with Repeated Measures (Two-Way) for Basic Business Course

| Source | df | Sum of Squares | Mean Squares | F-Ratio |
| :--- | ---: | :---: | :---: | :---: |
| Groups | 1 | .08424 | .08424 | .0712 |
| Subjects within groups | 40 | 47.29581 | 1.18240 |  |
| R | 2 | 1.29057 | .64529 | 1.5616 |
| Groups $\times$ R | 2 | 1.25826 | .62913 | 1.5225 |
| R x subjects within <br> groups | 82 | 33.8840 | .41322 |  |
| Total | 127 | 83.81288 |  |  |

The adjusted means for all Basic Business Course rating scores were as follows: Traditional Class $(\mathrm{n}=60), 5.5207$; and Student-
centered Class $(n=69), 5.5303$. The adjusted means for both classes on the three tests are presented in Table 12.

Table 12

Adjusted Post-Tests Means (Both Classes) for Basic Business Course

| No. of <br> Students | Test No. | Ad justed <br> Means |
| :---: | :---: | :---: |
| 43 | 2 | 5.4516 |
| 43 | 3 | 5.4586 |
| 43 | 4 | 5.6672 |

The adjusted means for each class on the three tests are summarized individually in Table 13.

Table 13
Adjusted Post-Tests Means (Each Class)
for Basic Business Course

| No, of <br> Students | Traditional <br> C1ass | Student- <br> Centered <br> Class | Adjusted <br> Means | Adjusted <br> Mean <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 2 |  | 5.5859 |  |
| 20 | 3 |  | 5.4314 | -.1545 |
| 20 | 4 | 2 | 5.5449 | +.1135 |
| 23 |  | 3 | 5.3349 |  |
| 23 |  | 4 | 5.4823 | +.1474 |
| 23 |  | 5.7736 | +.2013 |  |

Basic business classmates. A two-way analysis of covariance with repeated measures yielded the results, sumarized in Table 14, relating to student attitude toward Basic Business Classmates. The F-ratio between groups, . 1040, was not significant at the .05 level. An analysis of a difference in testing over both groups yielded an F-ratio of . 0612, which was not significant at the .05 level. The analysis to determine if the two groups reacted in the same way as they progressed through the testing resulted in an F-ratio of 1.7676, which was not significant at the .05 level. The overall hypothesis relating to differences in student attitude toward Basic Business Classmates was rejected.

Table 14
Analysis of Covariance with Repeated Measures (Two-Way) for Basic Business Classmates

| Source | df | Sum of Squares | Mean Squares | F-Ratio |
| :--- | ---: | :---: | :---: | :---: |
| Groups | 1 | .06835 | .06835 | .1040 |
| Subjects within groups | 40 | 26.29462 | .65737 |  |
| R | 2 | .02580 | .01290 | .0612 |
| Groups x R <br> R x subjects within <br> groups | 82 | .74526 | .37263 | 1.7676 |
| Total | 127 | 44.42010 | .21081 |  |

The adjusted means for all Basic Business Classmates rating scores were as follows: Traditional Class $(n=60), 5.7503$; and Student-centered

Class ( $n=69$ ), 5.7184. The adjusted means for both classes on the three tests are presented in Table 15.

Table 15
Adjusted Post-Tests Means (Both Classes) for Basic Business Classmates

| No. of <br> Students | Test No. | Adjusted <br> Means |
| :---: | :---: | :---: |
| 43 | 2 | 5.7137 |
| 43 | 3 | 5.7393 |
| 43 | 4 | 5.7467 |

The adjusted means for each class on the three tests are summarized individually in Table 16.

Table 16
Adjusted Post-Tests Means (Each Class)
for Basic Business Classmates

| No. of <br> Students | Traditional <br> Class | Student- <br> Centered <br> Class | Adjusted <br> Means | Adjusted <br> Mean <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 2 |  | 5.8326 |  |
| 20 | 3 |  | 5.7521 | -.0805 |
| 20 | 4 | 2 | 5.6661 | -.0860 |
| 23 |  | 3 | 5.6103 |  |
| 23 |  | 4 | 5.7282 | +.1179 |
| 23 |  | 5.8169 | +.0887 |  |

Teaching. A two-way analysis of covariance with repeated measures yielded the results, summarized in Table 17 , relating to student attitude toward Teaching. The F-ratio between groups, . 2017, was not significant at the .05 level. An analysis of a difference in testing over both groups yielded an F-ratio of .0084 , which was not significant at the .05 level. The analysis to determine if the two groups reacted in the same way as they progressed through the testing resulted in an F-ratio of .4993, which was not significant at the .05 level. The overall hypothesis relating to differences in student attitude toward Teaching was rejected.

Table 17
Analysis of Covariance with Repeated Measures (Two-Way) for Teaching

| Source | df | Sum of Squares | Mean Squares | F-Ratio |
| :--- | :---: | :---: | :---: | :---: |
| Groups | 1 | .23763 | .23763 | .2017 |
| Subjects within groups | 40 | 47.12348 | 1.17809 |  |
| R | 2 | .00554 | .00277 | .0084 |
| Groups x R | 2 | .32767 | .16384 | .4993 |
| R subjects within | 82 | 26.90826 |  |  |
| groups |  |  |  |  |

The adjusted means for all Teaching rating scores were as follows:
Traditional Class $(n=60), 5.7084$; and Student-centered Class $(n=69)$,
5.5943. The adjusted means for both classes on the three tests are presented in Table 18.

Table 18
Adjusted Post-Tests Means (Both Classes)
for Teaching

| No. of <br> Students | Test No. | Adjusted <br> Means |
| :---: | :---: | :---: |
| 43 | 2 | 5.6553 |
| 43 | 3 | 5.6474 |
| 43 | 4 | 5.6393 |

The adjusted means for each class on the three tests are summarized individually in Table 19.

Table 19
Adjusted Post-Tests Means (Each Class)
for Teaching

| No. of <br> Students | Traditional <br> Class | Student- <br> Centered <br> Class | Adjusted <br> Means | Adjusted <br> Mean <br> Change |
| :--- | :---: | :---: | :---: | :---: |
| 20 | 2 |  | 5.7740 |  |
| 20 | 3 |  | 5.7230 | -.0510 |
| 20 | 4 | 2 | 5.6280 | -.0950 |
| 23 |  | 3 | 5.5522 |  |
| 23 |  | 4 | 5.5817 | +.0295 |
| 23 |  |  | 5.6491 | +.0674 |

Learning. A two-way analysis of covariance with repeated measures yielded the results, summarized in Table 20 , relating to student attitude toward Learning. The F-ratio between groups, .0177 , was not significant at the .05 level. An analysis of a difference in testing over both groups yielded an F-ratio of 1.9867 , which was not significant at the .05 level. The analysis to determine if the two groups reacted in the same way as they progressed through the testing resulted in an F-ratio of 1.4360 , which was not significant at the .05 level. The overall hypothesis relating to differences in student attitude toward Learning was rejected.

Table 20
Analysis of Covariance with Repeated Measures (Two-Way) for Learning

| Source | df | Sum of Squares | Mean Squares | F-Ratio |
| :--- | ---: | :---: | :---: | :---: |
| Groups | 1 | .02209 | .02209 | .0177 |
| Subjects within groups | 40 | 49.80054 | 1.24501 |  |
| R | 2 | 1.55039 | .77520 | 1.9867 |
| Groups x R | 2 | 1.12063 | .56032 | 1.4360 |
| R x subjects within <br> groups | 82 | 31.99565 | .39019 |  |
| Total | 127 | 84.48930 |  |  |

The adjusted means for all Learning rating scores were as follows: Traditional Class $(n=60), 5.2098$; and Student-centered Class $(n=69)$,
5.2233. The adjusted means for both classes on the three tests are presented in Table 21.

Table 21
Adjusted Post-Tests Means (Both Classes)
for Learning

| No. of <br> Students | Test No. | Adjusted <br> Means |
| :---: | :---: | :---: |
| 43 | 2 | 5.1395 |
| 43 | 3 | 5.1395 |
| 43 | 4 | 5.3721 |

The adjusted means for each class on the three tests are sumarized individually in Table 22.

Table 22
Adjusted Post-Tests Means (Each Class)
for Learning

| No, of <br> Students | Traditional <br> Class | Student- <br> Centered <br> Class | Adjusted <br> Means | Adjusted <br> Mean <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 2 |  | 5.2265 |  |
| 20 | 3 |  | 5.1765 | -.0500 |
| 20 | 4 | 2 | 5.2265 | +.0500 |
| 23 |  | 3 | 5.0639 |  |
| 23 |  | 4 | 5.1074 | +.0435 |
| 23 |  |  | 5.4987 | +.3913 |

Me. A two-way analysis of covariance with repeated measures yielded the results, summarized in Table 23, relating to student attitude toward Me (self). The F-ratio between groups, . 3656 , was not significant at the . 05 level. An analysis of difference in testing over both groups yielded an F-ratio of .8753 , which was not significant at the .05 level. The analysis to determine if the two groups reacted in the same way as they progressed through the testing resulted in an F-ratio of .7402 , which was not significant at the .05 level. The overall hypothesis relating to differences in student attitude toward Me (self) was rejected.

Table 23
Analysis of Covariance with Repeated Measures (Two-Way) for Me

| Source | df | Sum of Squares | Mean Squares | F-Ratio |
| :---: | :---: | :---: | :---: | :---: |
| Groups | 1 | . 39639 | . 39639 | . 3656 |
| Subjects within groups | 40 | 43.37019 | 1.08425 |  |
| R | 2 | . 58368 | . 29184 | . 8753 |
| Groups $\times$ R | 2 | . 49364 | . 24682 | . 7402 |
| $R \times$ subjects within groups | 82 | 27.34128 | . 33343 |  |
| Total | 127 | 72.18518 |  |  |

The adjusted mean or all "Me" rating scores were as follows: Traditional Class ( $n=60$ ), 5.4320; and Student-centered Class $(n=69)$,
5.3386. The adjusted means for both classes on the three tests are presented in Table 24.

Table 24
Adjusted Post-Tests Means (Both Classes)
for Me

| No. of <br> Students | Test No. | Adjusted <br> Means |
| :---: | :---: | :---: |
| 43 | 2 | 5.2912 |
| 43 | 3 | 5.4030 |
| 43 | 4 | 5.4519 |

The adjusted means for each class on the three tests are summarized individually in Table 25.

Table 25
Adjusted Post-Tests Means (Each Class)
for Me

| No. of <br> Students | Traditional <br> Class | Student- <br> Centered <br> Class | Adjusted <br> Means | Adjusted <br> Mean <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 2 |  | 5.4158 |  |
| 20 | 3 |  | 5.4648 | +.0490 |
| 20 | 4 | 2 | 5.4153 | -.0495 |
| 23 |  | 3 | 5.1828 |  |
| 23 |  | 4 | 5.3493 | +.1665 |
| 23 |  | 5.4836 | +.1343 |  |

FACTUAL DATA RECORDED FOR TRADITIONAL AND STUDENT-CENTERED CLASSES

Factual data, including absences, grades, and student activities, were recorded for the traditional and the student-centered Introduction to Basic Business classes.

Total Students, Total Days Absent, and Total Days Tardy in Each Class

During the semester, detailed records were kept for both the traditional and the student-centered classes. A total of twenty students completed the traditional Introduction to Basic Business course and a total of twenty-three students completed the student-centered Introduction to Basic Business course. Data relating to the total days absent, the total days tardy, and the total number of students entering and leaving the classes, indicated in Table 26 , revealed a comparison of the two groups during the semester.

Table 26
Total Students, Total Days Absent, and Total Days Tardy for Traditional and Student-Centered Classes

| Characteristic | Traditional <br> Class | Student-Centered <br> Class |
| :--- | :---: | :---: |
| Total students enrolled | 20 | 23 |
| Total days absent | 129 | 111 |
| Total days tardy | 7 | 7 |
| Total students entering | 0 | 1 |
| Total students leaving | 0 | 1 |

Traditional class. Twenty students completed the traditional Introduction to Basic Business course. The number of absences during the 90 -day semester totaled 129 , or an average of 6.45 days per student. Thirty-eight days were reported as due to illness. One student dropped out of school for seven days and then returned. The remaining 84 days were for various miscellaneous reasons. One student attended class every day during the semester. The number of days tardy totaled seven. Although one student did drop out for seven days, he returned to the class and the final class roll contained the names of the same twenty students enrolled by the end of the first week.

Student-centered class. Twenty-three students completed the studentcentered Introduction to Basic Business course. The number of absences during the 90 -day semester totaled 111 , or an average of 4.83 days per student. Thirty-eight days were reported as due to illness. One student was married during the semester and was out of school for seven days. The remaining 66 days were for various miscellaneous reasons. One student attended class every day during the semester. The number of days tardy totaled seven. One student moved to another school district in October and a new student moved into the Trinity School District. She entered the class in October. The final class roll contained twentyfour names.

## Grading Periods and Grades

The Trinity Senior High School grading plan consisted of a grade for each of the two grading periods and a semester grade. The first
grading period was at the end of the $n i n t h$ week and the second grading period at the end of the eighteenth week. The grades earned by the students for each of the two nine-week periods and the semester grades, summarized in Table 27 , were recorded in report card form. The school's grading scale was as follows: A--93-100; B--85-92; C--77-84; and D--7076.

Table 27

Grades Earned: Ninth Week, Eighteenth Week, and Semester in Traditional and Student-Centered Classes

| Grade | Traditional Class $(n=20)$ |  | Student-Centered Class ( $n=23$ ) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9 th | $18 t h$ | Semester | 9 th | 18 th | Semester |
| A | 6 | 5 | 5 | 3 | 4 | 4 |
| B | 6 | 4 | 5 | 10 | 11 | 10 |
| C | 2 | 2 | 2 | 9 | 6 | 8 |
| D | 2 | 4 | 4 | 1 | 2 | 1 |
| F | 4 | 5 | 4 | 0 | 0 | 0 |

Traditional class. Grades in the traditional class consisted of the average of the test grades during the nine-week period and the three assignment points which were added to or subtracted from the average. During the first nine weeks, six students earned a grade of $A$ and four students earned a failing grade, or $F$. In the second grading period, five students, a decrease of one, earned a grade of $A$ and five students,
an increase of one, earned an $F$. The semester grades indicated that five students had earned an $A$ and four students had failed for the semester.

Student-centered class. Grades in the student-centered class consisted of a grade on each activity completed during the grading period. The grade for each activity was mutually agreed upon by the student and the teacher. The nine-week grade was an average of the grades on individual activities. During the first nine weeks, three students earned a grade of $A$ and one student a grade of $D$, the lowest grade in the class. No one earned an $F$. In the second grading period, four students, an increase of one, earned a grade of $A$ and two students, an increase of one, earned a grade of D. No one received an F. Semester grades for the studentcentered class included four A's and one D. There were no F's.

A comparison of the two classes revealed that although there were more $A^{\prime}$ s in the traditional class, there were also four failures. The student-centered class had one less $A$, but there were no failures.

## Student Activities

The student activities in each of the two Introduction to Basic Business classes were completely different. The traditional class was teacher-directed and the entire class worked on the same chapter, questions, and exercises. The student-centered class was student-oriented with students selecting their own topic areas and determining their own activities.

Traditional class. The eight topic areas in the traditional class were presented through the use of the corresponding textbook chapters.


#### Abstract

Approximately two weeks were devoted to each topic area. The students were assigned specific questions and exercises, approximately ten to fifteen, at the end of a chapter. Twenty-nine chapters, consisting of 3-7 pages, were completed during the semester. Three students made a grocery store price comparison, three students presented a skit, and one guest speaker was invited to the class. All of these activities were teacher-directed and assigned.


Student-centered class. The eight topic areas in the student-centered class were presented as learning activity centers. The students were free to select any topic area and any activity in which they had an interest at the time. During the semester, each student was to move through each of the eight topic areas. Although time restrictions for each area were not specified, the students were told to use a two-week period as a guide in each area. This would allow time for working in each area in the eighteen-week semester. The students were allowed to pursue as many activities in each topic area as they wished. In one area, one student might complete one or two in-depth activities and another student working in the same area might complete ten lessinvolved activities.

During the semester, the students in the student-centered class completed and reported 458 activities. This total included 331 activities from the initial learning activities' sheets and 127 student-initiated activities (see Appendix I); 259 activities were completed through the use of classroom and library materials within the school and 199
activities involved research and investigation in the comunity. Many of the activities resulted in the preparation of charts and posters for classroom display. During the semester approximately 76 posters and charts were prepared by the students.

ACHIEVEMENT, ATTITUDE, AND ACTIVITIES OF SELECTED STUDENTS IN THE TRADITIONAL AND STUDENT-CENTERED CLASSES

In order to present a detailed description of the student partici* pants, three students in each of the two classes were selected on the basis of the following criteria: (1) highest score in each class on the achievement post-test, (2) lowest semester grade earned in each class, and (3) a brother-sister pair, one in the traditional class and one in the student-centered class. These criteria were identified as a means of providing insight into the activities, attitudes, and achievement of students of various abilities in each of the two classes.

## Traditional Class

Three students in the traditional class were selected on the basis of the stated criteria.

Highest score on the achievement post-test. Student A-1 was a 16-yearold male student classified as a sophomore. On the achievement pre-test, he scored a total of 31 out of a possible 50 points. Student A-1 scored 33 points on the achievement post-test, which was the highest score in the traditional class. The score of 33 represented an increase of two points over the pre-test score and when compared with the norms for the

Test of Understanding in Personal Economics is equal to or better than 92 percent of the total norms sample.

Student A-1 was absent three days during the semester and earned the following test scores on the topic area tests: Test 1,$96 ;$ Test 2, 96; Test 3, 97; Test 4, 98; Test 5, 96; Test 6, 96; and Test 7, 100. Student A-1 received a check mark each time his assignment notebook was reviewed by the teacher. He earned the following grades during the semester: ninth week, A; eighteenth week, A; and semester, A.

Attitude scores, as indicated by the semantic differential, were recorded for Student $A-1$ as follows:

Community. Student A-1 indicated a rating of 6.17 for Community on the pre-test in September. On the second testing date, there was a decrease of -.59. However, on the third and fourth testing dates, Student A-1 rated Community at 6.00 , an overall decrease from the pretest rating of -.17 .

School. Although Student A-1 indicated a decrease in attitude toward School on the second testing date, there was a gradual increase throughout the remainder of the semester to 6.75 in January, an increase of +.08 over the pre-test rating (6.67).

Basic business course. Student A-1 indicated a positive attitude toward the Basic Business Course on the pre-test, but there was a decrease in ratings on the second and third testing dates. The final rating score of 6.75 was identical to the original rating.

Basic business classmates. The rating score of 6.67 on the pretest was the highest rating indicated by Student A-1 toward Basic Business

Classmates. There was a decrease on the second testing date, an increase on the third testing date, and a decrease on the fourth testing date. Student A-1 indicated a total decrease from pre-test (6.67) to final post-test (6.42) of -. 25 .

Teaching. Student A-1 indicated a positive attitude rating of 6.75 toward Teaching on the pre-test in September. In October, there was a decrease of -.08 . However, on the third and fourth testing dates, Student A-1 increased in his ratings and indicated an overall increase from the pre-test to the final post-test of +.17 .

Learning. The rating scores for Learning indicated by Student A-1 remained fairly constant throughout the semester with the exception of the third testing date, which increased by +.16 . The final testing date revealed a rating of 6.67 , the same as the pre-test rating.

Me. Student A-1 indicated a positive rating score of 6.50 on the pre-test in September. However, as the semester progressed, the ratings remained the same or decreased. The final rating score of 6.17 represented a decrease of $\mathbf{- .} 33$ from the pre-test rating.

The overall ratings from pre- to final post-tests were not consistent for Student A-1. There was a decrease in rating scores on Community, Basic Business Classmates, and Me. Student A-1 indicated an increase in ratings on School and Teaching, and the ratings, overall, remained the same for Basic Business Course and Learning.

Lowest semester grade earned. Student $B-1$ was a 16 -year-old female classified as a sophomore. She was absent four days during the semester and earned a grade of $F$, the lowest semester grade and average in the
traditional class. Student B-1 achieved the following test scores on the topic area tests during the semester: Test 1, 56; Test 2, 53; Test 3, 58; Test 4, 69; Test 5, 44; Test 6, 65; and Test 7, 69. She received nine check marks and one minus on her assignment notebook. Student B-1 earned the following grades during the semester: ninth week, F; eighteenth week, $F$; and semester, $F$.

On the achievement pre-test, Student B-1 scored 17 out of a possible 50 points. Her post-test score was 18 , an increase of one over the pre-test score. When compared with the norms for the Test of Understanding in Personal Economics, a score of 18 is equal to or better than the scores of 41 percent of the total norms sample.

Attitude scores, as indicated by the semantic differential, were recorded for Student $B-1$ as follows:

Community. Student B-1 rated Commity at 4.50 on the pre-test in September. There was an increase on the second testing date, a decrease on the third testing date, and an increase to 5.42, a total increase of +.92 from pre-test to final post-test rating.

School. The pre-test attitude rating by Student B-1 for School was 4.50. There was a general increase in attitude as the semester progressed, with the exception of the third testing date, to 5.75 on the final post-test in January. This represented an increase over the pretest rating of +1.25 .

Basic business course. Student B-1 indicated a positive attitude toward the Basic Business Course in September. However, there was a decrease of -1.00 on the second testing date and an additional decrease
of -.83 on the third testing date. The final post-test rating increased to 5.08, which represented a decrease from the pre-test (5.50) to final post-test of -.42.

Basic business classmates. In rating Basic Business Classmates, Student B-1 indicated a positive rating of 5.42 on the pre-test. There was a steady increase on testing dates three and four, but a decrease in January to 5.00 , a decrease from the pre-test rating of $\mathbf{- . 4 2}$.

Teaching. Student B-1 showed an increase in positive attitude toward Teaching as the semester progressed. The final post-test rating of 5.42 represented an increase of +1.17 over the pre-test (4.25) rating.

Learning. Learning was rated by Student B-1 at 4.25 on the pretest. On the second testing date, there was an increase, but a decrease was indicated on the third testing date. The final post-test rating of 5.42 showed an increase of +1.17 over the pre-test rating.

Me. Student B-1 indicated a positive attitude toward Me (self) on the pre-test date. However, as the semester progressed, there was a consistent decrease to 5.00 on the final post-test in January. This represented a decrease of -1.42 from the pre-test (6.42) rating.

An increase in positive attitude was indicated by Student B-1 toward Community, School, Learning, and Teaching. However, there was a decrease in positive attitude toward the Basic Business Course, Basic Business Classmates, and Me.

Brother-sister pair. Student C-1 was a 17-year-old female classified as a sophomore. During the semester, she was absent from class one day. Student C-1 achieved a score of 16 out of a possible 50 points on the
achievement pre-test. On the post-test, she scored 18 points, an increase of two points over the pre-test score. When compared with the norms for the Test of Understanding in Personal Economics, a score of 18 is equal to or better than the scores of 41 percent of the total norms sample.

Student C-1 achieved the following scores on the topic area tests:
Test 1, 64; Test 2, 60; Test 3, 55; Test 4, 90; Test 5, 42; Test 6, 76;
and Test 7, 64. She received a check mark each time her assignment notebook was reviewed by the teacher. Student C-1 earned the following grades during the semester: ninth week, $F$; eighteenth week, $F$; and semester, $F$.

Attitude scores, as indicated by the semantic differential, were recorded for Student $\mathrm{C}-1$ as follows:

Community. Student C-1 indicated a 5.92 rating for Community on the pre-test in September. There was an increase on the second testing date, and a decrease during the remainder of the semester. The final post-test rating in January of 5.75 was a decrease from the pre-test rating of -. 17 .

School. Student C-1 showed a positive attitude toward School on the pre-test rating. However, as the semester progressed, there was a general decrease in attitude toward School. The rating of 5.25 on the post-test in January represented a decrease of -. 25 from the pre-test (5.50) rating.

Basic business course. The rating of 6.00 by Student C-1 represented a positive attitude toward the Basic Business Course in September. As the semester progressed, there was a definite decrease on each of the
succeeding testing dates. The final post-test rating of 4.58 was a decrease of -1.42 from the pre-test rating.

Basic business classmates. Student $C-1$ indicated a positive attitude toward Basic Business Classmates throughout the semester. However, there was a total decrease from the pre-test (6.25) rating to the final post-test (6.17) rating of -.08.

Teaching. The rating of 4.83 on the pre-test by Student C-1 represented a slightly above average attitude relating to Teaching. There was an increase on the second testing date, but a gradual decrease during the remainder of the semester to 5.50 on the final post-test date. This represented an increase over the pre-test rating of +.67 .

Learning. Student $C-1$ indicated a rating score of 5.42 on Learning at the pre-test date. On the second testing date, there was an increase of +1.09 . The third testing date represented a decrease, but there was an increase on the final post-test date to 6.33 , an increase of +.91 over the pre-test rating.

Me. A positive attitude toward Me was indicated by the student on the pre-test date. There was an increase on the second testing date, but a decrease on the third. The final post-test rating of 6.33 was an increase from the pre-test (5.58) to the final post-test of +.75.

Student C-1 indicated a positive increase in attitude toward Teaching, Learning, and Me as the semester progressed. However, there was a decrease in attitude toward Community, School, Basic Business Course, and Basic Business Classmates from pre-tests to final post-tests ratings.

## Student-Centered Class

Three students in the student-centered class were selected on the basis of the stated criteria.

Highest score on the achievement post-test. Student A-2 was a 17-yearold male student classified as a senior. On the achievement pre-test, he scored a total of 30 out of a possible 50 points. Student A-2 achieved a score of 38, an increase of 8 points, on the achievement post-test, the highest score in the student-centered or the traditional class. When compared with the norms established for the Test of Understanding in Personal Economics, a score of 38 is equal to or exceeds the scores of 97 percent of the total norms sample.

During the semester, Student $\mathrm{A}-2$ was absent from class two days. He completed a total of 23 activities during the semester. Student A-2 was the first student to complete and report an activity at the beginning of the school term.

Most of the activities selected by Student A-2 were individual activities. In the special group activity, Student A-2 worked with two other students. The group visited a local soft-drink bottling company, investigated its operations, and reported the findings in the form of a radio news interview.

Student A-2 earned the following grades during the semester: ninth week, A; eighteenth week, B; and semester, B.

Attitude ratings, as revealed by the semantic differential, were recorded as follows for Student A-2:

Community. On the basis of a 7 -point scale, the 5.42 rating on the pre-test indicated that Student $A-2$ had a slightly above average attitude about the Commity at the beginning of the semester. As the semester progressed, Student A-2's attitude toward the Community was less favorable but did not drop below the 4.00 midpoint. On the post-test in January, Student A-2 described a more favorable attitude than on the two previous rating dates or the initial rating date. The rating of 6.00 represented an increase of +.58 at the final post-test date over the pre-test rating.

School. Student A-2 rated School at 4.75 on the pre-test in September. During the second and third rating periods, his attitude toward School decreased. However, on the post-test date, Student A-2 indicated a more favorable attitude with a total increase at the final testing (5.67) of +.92 over the pre-test rating.

Basic business course. Student A-2 demonstrated a favorable attitude of 5.00 on the pre-test rating of the Course. On the two succeeding testing dates, Student $A-2$ 's attitude toward the Course decreased. On the final testing date, Student $A-2$ indicated an attitude of 6.00 , an increase over the pre-test total of +1.00 .

Basic business classmates. An attitude of 5.83 toward Basic Business Classmates was revealed by Student A-2 on the pre-test date. The second and third ratings indicated a decrease in attitude. The posttest rating of 6.00 represented an increase over each of the previous ratings, with an increase of +.17 over the pre-test date.

Teaching. The pre-test rating of 5.17 indicated a favorable attitude toward Teaching. Student A-2 revealed a decrease in attitude on the
second and third rating dates. However, the rating of 6.00 on the final post-test represented an increase over each previous rating and an increase of +.83 over the pre-test.

Learning. Student $\mathrm{A}-2$ rated Learning on the pre-test with a favorable 5.83. In the second and third periods, attitude toward Learning decreased, but increased to 6.00 on the final post-test in January. This represented an increase of +.17 over the pre-test rating.

Me. In his rating of attitude toward himself, Student A-2 indicated a rating of 5.08 on the pre-test. On the second rating date, attitude toward self decreased slightly, but showed a 2.00 increase on the third rating date. The post-test rating of 6.00 represented an increase of +.92 over the pre-test rating.

The ratings on each of the seven concepts represented a favorable increase in attitude between pre-test and post-test dates. On each of the concepts, the second rating date revealed a decrease in attitude. A decrease was also indicated on the third rating date on Community, School, and Course; however, an increase was indicated on Classmates, Learning, Teaching, and Me. Overall, Student A-2 revealed a favorable increase in positive attitude on all concepts from the pre-test to the final posttest dates.

Lowest semester grade earned. Student B-2 was a 17 -year-old male classified as a junior. He was absent from class a total of five days. During the semester, Student B-2 completed 13 activities. In the first nine weeks, he completed three activities and received grades of $C-D$, and $D$. During the second nine weeks, Student B-2 completed 10 activities.

Semester grades earned by Student B-2 were as follows: ninth week, D; eighteenth week, D; and semester, D. This was the lowest grade earned in the student-centered class and was the only $D$.

On the achievement pre-test, Student B-2 earned a score of $\mathbf{2 0}$ out of a possible 50 points. On the achievement post-test, he scored 33 points, an increase of 13 , the highest increase in the studentcentered or the traditional classes. When compared with the norms for the Test of Understanding in Personal Economics, a score of 33 is equal to or better than the scores of 92 percent of the total norms sample.

Attitude scores, as indicated by the semantic differential, were recorded for Student B-2 as follows:

Community. Student B-2 indicated a positive attitude toward Community on the pre-test date. There was a decrease on the third testing date, but an increase on the final post-test date to 6.00, an increase of +.08 over the pre-test (5.92) rating.

School. The rating of 5.42 by Student B-2 indicated a positive attitude toward School in September. As the semester progressed, there was a general increase in ratings, but a decrease on the final testing date. However, the 5.83 rating on the final post-test represented an increase of +.41 over the pre-test rating.

Basic business course. Student B-2 indicated a rating of 5.67 on the pre-test date. There was an increase on the second testing date, but a decrease on the third. The final post-test rating of 6.00 was an increase of +.33 over the pre-test rating.

Basic business classmates. The rating of 6.08 by Student B-2 indicated a positive attitude toward Basic Business Classmates on the
pre-test in September. There was an increase on the second testing date, a decrease on the third rating date, and a decrease on the final testing date. The 6.00 rating on the final post-test in January represented a decrease of -.08 from the pre-test rating.

Teaching. Student B-2 indicated a rating of 5.92 on the September pre-test. There was an increase on the second testing date, a decrease on the third testing date, and an increase on the final post-test in January. The rating on the final testing date represented an increase (6.25) of +.33 over the pre-test rating.

Learning. Student B-2 rated Learning with a rating score of 6.08 on the pre-test. There was an increase on the second testing date and a decrease on the third. The 6.00 rating on the final testing date represented a decrease of -.08 from the pre-test rating.

Me. The attitude of Student B-2 toward Me showed an increase from the pre-test date through the third testing. However, there was a decrease on the final post-test date. The final rating of 6.00 reflected an increase over the pre-test (5.50) rating of +.50 .

Student B-2 indicated a positive increase in attitude toward Community, School, Basic Business Course, Teaching, and Me as the semester progressed. There was a decrease in positive attitude toward Basic Business Classmates and Learning.

Brother-sister pair. Student C-2 was a 16 -year-old male classified as a sophomore. He was absent from class five days during the semester. Student C-2 achieved a score of 22 on the achievement pre-test out of a possible 50 points. On the post-test, he also scored 22 points. When
compared with the norms for the Test of Understanding in Personal Economics, a score of 22 is equal to or better than the scores of 62 percent of the total norms sample.

Student C-2 earned the following grades in the Introduction to Basic Business course, student-centered: ninth week, C; eighteenth week, $C$; and semester, C.

Attitude scores, as indicated by the semantic differential, were recorded for Student $\mathbf{C - 2}$ as follows:

Community. Student C-2 indicated a slightly negative attitude toward the Comunity on the pre-test in September. There was an increase on the second and third testing dates. The final rating of 4.58 represented an increase over the pre-test (2.83) of +1.75 .

School. The pre-test rating of 5.25 was the highest rating indicated by Student C-2 for School. There was a decrease on the second testing date, an increase on the third, and a decrease on the final posttest date (4.50) representing a decrease of -.75 from the pre-test rating.

Basic business course. Student C-2 indicated a positive attitude toward the Basic Business Course on the pre-test in September. However, on the second and third testing dates, there was a decrease in rating scores. The 6.17 rating on the final post-test was a decrease of -. 25 from the pre-test (6.42) rating.

Basic business classmates. Student C-2 rated the Basic Business Classmates at 5.33 on the pre-test in September. There was a slight increase on the second testing date to 5.42. The third testing date showed a rating of 5.92 which again indicated an increase in positive attitude toward Basic Business Classmates, a gradual increase as the
semester progressed. The 6.08 rating on the final testing date showed an increase of +.75 over the pre-test rating.

Teaching. Student C-2 indicated a positive attitude toward Teaching on the pre-test date in September. There was a decrease on the second testing date to 4.92 . The third testing date revealed an increase to 5.75. The rating given Teaching on the final post-test date in January was 6.00 which was the same as the initial rating in September.

Learning. On the pre-test rating date in September, Student C-2 indicated a 5.42 rating for Learning. On the second testing date, there was a decrease to 4.92. However, on the third testing date, there was an increase to 5.50 , which was higher than the September pre-test rating score. Student C-2 indicated a rating score of 6.00 on the final posttest date in January. This represented an increase from pre-test to final post-test of +.58 .

Me. Student C-2 indicated a rating of 4.58 toward $M e$ on the pretest in September. At the second testing date, he showed a rating score of 5.42 which was an increase over the pre-test rating. On the third testing date, there was also an increase to 5.50 . The rating score indicated by Student C-2 on the final post-test date in January was 6.17 which represented an increase of +1.59 over the September pre-test rating.

Student C-2 increased in positive attitude toward Community, Basic Business Classmates, Learning, and Me from the pre-test date to the date of the final post-test in January. There was a decrease in positive attitude toward School and Basic Business Course. The rating scores for Teaching remained the same from the September pre-test to the final posttest in January.

## RESEARCHER'S OBSERVATION NOTES

The researcher observed the traditional and the student-centered classes every day during the first two weeks of the semester and at least two days per week during the remainder of the semester. On each day of observation, the researcher recorded detailed notes of the teacher and student activities in each class. The following excerpts indicated the impressions of the observer in the traditional class and the studentcentered class. Selected comments collected through informal interviews with the students and the principal are also presented.

## Traditional Class

The following comments represented the impressions of the observer in the traditional Introduction to Basic Business class at various times throughout the semester. The observer's comments were identified in the notes as "OC."

## Dates

August 28, 1974

August 29, 1974

## Comments

OC--This was the first day of class. The teacher distributed the course objectives and explained the class procedures. Books were distributed and the students were given the remainder of the period to read the assigned chapter. There was not a lot of excitement in the classroom today. The students left the room immediately when the bell rang.

OC--Basically teacher lecture and class discussion. Students did not volunteer to answer questions. There was very little student-teacher interaction.

## Dates

September 4, 1974

September 12, 1974

September 27, 1974

October 1, 1974

October 24, 1974

## Comments

OC--The teacher remained seated at the desk during the entire period. I really have no interaction with this class. I hope I will be able to talk with some of the students after class a little later.

The principal came into the classroom. This did not appear to disturb the students.

A new student enrolled in the class today. She seemed to be an extrovert. The students seemed to like her.

OC--The teacher asked several of the students to answer a question. They did not know the answer. The teacher stated that she was disappointed in them. One student does not have a notebook, which is required by the teacher for class notes and homework.

The students seemed much more relaxed today. The atmosphere seemed more informal.

OC--The atmosphere was more relaxed today. The teacher made a seating chart for the class. The students selected their own seats, but they must remain in these each day.

OC--The teacher read some material from Vance Packard's Hidden Persuaders. No one in the class had heard of Packard or the book.

OC--Several students were yawning today. They appear to be uninterested.

The students moved into their groups for a question-answer period. There was some good thinking during this exercise. The students tried to defend their answers.

Three of the groups complained that one particular group was being asked easy questions and that it wasn't fair.

OC--The teacher asked a number of memory questions. Basically teacher lecture and discussion.

## Dates

## Comments

| October 29, 1974 | OC--The teacher lectured the entire period. |
| :---: | :---: |
| October 31, 1974 | OC--The teacher worked at her desk while the students read a chapter in the textbook. The teacher always sits at the desk in this class. |
| November 18, 1974 | OC--The students presented a skit today. The teacher selected the skit and the students to participate. The teacher read the correct decision from the manual. |
| December 3, 1974 | OC--The students had been assigned a set of questions for today. Seven students did not have the assignment. |
| January 9, 1975 | OC--The students were to present a newspaper article today. Five students did not have an article. |

## Student-Centered Class

The following comments represent the impressions of the observer in the student-centered Introduction to Basic Business class at various times throughout the semester. The observer's comments were identified in the notes as "OC."

## Dates <br> Comments

August 28, 1974

August 29, 1974

OC--This was the first day of class. The teacher sat on top of the desk and then moved around the room. Good explanation of plan.

OC--The teacher explained that there were many helpful resources in the school library. The students listened attentively to the explanation.

Several students indicated that they had already selected their initial topic areas.

## Dates

## Comments

August 29, 1974

September 3, 1974

September 4, 1974

OC--The male students began to move to the activity centers first. All the females remained in their seats for several minutes.

Several students appeared to be very interested in looking through the materials in the activity centers. Several selected materials and returned to a seat and began to read.

I walked around to the various activity centers and talked with several students about the activities that were of interest to them. They did seem to be excited. Every student (by the end of the period) had moved to an activity center and had selected some materials to read. The teacher did not have to tell one single student to get started on an activity. I was surprised that they went ahead on their own. I talked with several students. They were receptive and talked freely about their activities.

The department head came into the room and observed for the last half of the period. Near the end of the period, he brought me a booklet that can be included in one of the activity centers.

OC-I overheard two students talking during the class period today. One student commented, "I don't like this class. I wish I had taken business law." The other student replied, "Are you cracy. This class is a lot more interesting than any business law course."

0C--The students were very quiet today. They were working on individual activities. Several students asked to use the typewriters to complete their first projects.

The first oral report was given today.

Dates
September 9, 1974

September 13, 1974

September 24, 1974

September 26, 1974

October 10, 1974

## Comments

OC--The department head came in today to listen to an oral report that was of interest to him.

The students worked steadily during the period. Several reports were turned in to the teacher.

OC-m One of the students invited a speaker from a local bank to speak to the class today.

OC--The students seemed excited about making charts for display in the room. All the supplies are being furnished by the school.

OC--The principal came into the class today. He remained for the whole class period. He looked at the charts that have been constructed and suggested by the students.

The principal talked with one student about a report he was completing on the stock market. The student said, "The teacher and I are learning about this together."

Three students presented a television commercial they had prepared.

After the class, the principal made the following comments to the teacher and me: "Mhis is education. I know that it is going to work. It's harder for the teacher than sitting at the desk. We'1l see an increase in enrollment in this course next year."

OC--The teacher told me today that she thinks some of the enthusiasm has worn off. I was expecting this. In other studies of a similar nature, the first month or two have been rather chaotic. The opposite was true with this class. I have an activity planned to create enthusiasm. I think it's time to try it.

All of the students are working on their own activities today and the room is very quiet.

## Dates

## Comments

October 22, 1974
October 24, 1974

November 14, 1974

December 3, 1974

December 12, 1974

OC--The students seemed more excited today.
OC--The teacher seemed to think that the "lull" was over. We decided to wait until later to try the group activity.

OC--The teacher told me that she presented the group activity idea to the class yesterday and they seemed excited about it.

OC--The students appeared to be excited about some of the topic areas in which they were working today.

OC-Three students made a movie on land and air pollution as their group activity. They presented it to the class today. The Mother of one of the three attended the class to see the presentation. The film is beautiful and the commentary is very good.

The class members asked to see the film a second time.

The department head and one of the business education teachers came in to see the film. The principal also attended the class today.

At various times during the semester, the researcher circulated among the students and conducted informal interviews with different class members. The following student comments are quoted verbatim:

## Dates

## Comments

August 29, 1974
OC--This was the second class meeting of the semester. I walked around the room and talked with several students about their impressions of a course taught in this manner. The specific question was: "How do you think you will like a course taught in this way?" The following comments were made: (SC--Student Comment)

Dates
August 29, 1974

September 12, 1974

September 17, 1974

September 24, 1974

Comments
SC--"I think I'll like it a lot better than my courses last year."

SC--"I like being able to do what I want to do."
SC--"It seems like it will be a lot more fun."
SC--"I have a cousin at Carolina. It seems like the kind of things they do."

OC--This was an informal conversation with one of the students.

SC--"I would like to take this course again next year. Do you think they will let me? I like this."

OC--I asked why he liked the course.
SC--"I just really like it. It's easier than the other way. No, it's not easier--it's not boring."

OC-- 'What are your reactions to this class?" I talked with several students and asked this question.

SC--'I like it. I like to do what I want to do. If we were learning terms, we'd forget them, but we won't forget how to watch the stock exchange."

SC--'I think I work a lot harder, because it is something I want to do."

SC--'I like it."
SC--'I don't know if I would have worked harder or not."

SC--"I like this better."
SC--"I think it's OK."
OC--A student gave an oral report on an activity in the Credit area. I asked him how he felt about his experience.

Dates
September 24, 1974

September 26, 1974

October 17, 1974

December 19, 1974

January 9, 1975

## Comments

SC--"I enjoyed it. I wanted to do this because I didn't know anything about the Credit Bureau. I think I learned a lot."

OC--A student prepared a television comercial demonstrating fairness to the consumer. I later asked why he did this and if he felt it was a success.

SC--'I wanted to do this conmercial because I see a lot on television that are not really fair. I thought the class might like to see what can be done with advertising. I also wanted to prepare this for the class because I thought it might get the rest of them to do something similar."

OC--One student had been having some difficulty with his activities. Today, he asked me to help him make a decision about a chart he was making. I asked if he liked the course.

SC--"I like it much better now. I just had to get used to it."

OC--A student presented an oral report on the stock market. I talked with him after the class. I asked how he liked the activity he had just completed.

SC--'I really enjoyed it. I didn't know much about stocks before and I had fun at the local stock market."

OC--One student had worked on several activities in the community. I asked how he enjoyed the out-of-school work.

SC--"It's great. When you go out in the community, everything seems more real."

On each visit to the school, the researcher recorded detailed notes of the activities which took place in the traditional and the student-centered Introduction to Basic Business classes. The "teacher comments" included in the notes revealed the atmosphere of the learning environment in each of the two classes. The comments are quoted verbatim.

## Traditional Class

The following teacher comments were recorded during the semester in the traditional Introduction to Basic Business class.

## Dates

August 29, 1974

September 3, 1974
September 4, 1974

September 6, 1974

## Comments

OC--In each of the following situations, the teacher had been asking questions of the students or was making a general statement to the class. (TC--Teacher Comment.)

TC--"I'm not going to fuss with you today. I think you read the chapter, but didn't concentrate."

TC--"If you don't have your questions answered when they've been assigned, I'll just have to deduct a point from your grade."

TC--'I'11 check your notebooks before each test."
TC--"OK, you girls talk some."
TC--'Write these answers in your notebooks. Anytime you write something down, it helps you to learn it."

TC--'I'm disappointed in your answers today. Are you reading the chapters?"

TC--'OK, get out your notebooks. If you can't answer questions today, I'11 have to put something down for your daily grade."

## Dates

## Comments

September 6, 1974

September 12, 1974

September 13, 1974

TC--"OR, let's finish up. You're doing real well on these and you should."

TC--'I didn't have to give anybody a bad grade today."

TC--"Anytime you are assigned a chapter, you should expect a pop test. You won't have one today, but you should always expect one."

TC--"If you come in Monday and can't discuss, I'm going to give you a test."

TC--"Boy, you people better study tonight. I hope you are taking these notes down."

TC--'How many really studied for the review?" (Three students raised their hand.)

TC--'You can study for the rest of the period. You can let me check your notebooks if they are ready."

TC--"I'd like for you to make a real good grade on this first big test."

TC--"I'm not going to give you an assignment for Monday. We are going to do something different Monday--a crossword puzzle on the private enterprise system. Students will work in groups to see which group finishes first. That group will get four points if the puzzle is correct.'

TC--"These are the test papers. Turn them over and keep papers covered as you take the test. I don't think any of you would cheat, but don't tempt anyone."

TC--"Remember, keep your papers covered."
TC--"Come get your notebooks. I was pleased with them because everyone got a check."

TC--"Any of you who think of it bring in a current event article for Monday. You'll get extra credit."

## Dates

September 17, 1974

September 19, 1974

September 24, 1974

## Comments

TC--"Answer the questions assigned. Also, bring in an advertisement that would appeal to teenagers. If you don't bring it, I'll have to put down that you didn't bring in a daily assignment."

TC--'Did you read the chapter? How many of you read it?

TC--"I'm disappointed in you. You can't answer the questions. Do you want to start having pop tests?"

TC--"I want you people to start reading this. I don't want just three people in the class to read it."

TC--"Get out a piece of paper."
TC--'I'm only doing this because $I$ felt like at first you were learning-now, $I$ don't know."

TC--"Let's check the answers now."
TC--'Don't tell me you've read this. I'm disgusted with you. I'm disappointed in you. We'11 have to have three or four of these to make up for one big test."

TC--'I don't think this is funny. If I had given you a lot of work, it might be different."

TC--'Now people, I think I'm fair to you and I don't think you're fair to me."

TC--"OK, people, I want to talk to you a minute. If you had at least read the chapter, you would have known this. I don't like to do this or to threaten you. But, you are not reading like you did at first. How many of you read the chapter?" (Six people said yes.)

TC--'You should take these notes down while we discuss."

## Dates

September 24, 1974

October 3, 1974

October 16, 1974

November 14, 1974

## Comments

TC--"Write these down for homework and I don't want to hear 'I don't have that one.'"

TC--"OK, I wish you would take class notes every day."

TC--'Sit up, please."
TC--'His chapter has a lot of consumer information and you should know the answers just by reading it."

SC--"I just said 'uh-huh' to make you think everybody is listening. It's not nice for someone to talk and have nobody listen."

TC--"Some of you really need to improve on your grades after that pop test, don't you?"

OC--This was a conversation between the teacher and a student.

SC--"This is the first test I am going to fail in this course."

TC--'Why, didn't you study?"
SC-- 'No."
TC-- 'Why not?"
SC--"I didn't want to."
TC--'"That's a reason not to study, but you're sure of the consequences. You have answered my question."

TC-- Why didn't you tell me yesterday that you didn't want to do anything original. Why didn't you just summarize what's in the book? If you had told me yesterday that you needed help, I would have tried to help you." (To a student.)

TC--'I hope you do better on this test than you did on the last one."

## Dates

December 3, 1974

December 10, 1974

December 12, 1974

January 14, 1975

Comments
TC-- (Seven students did not have assigned work.) "OK, this is a zero for having come to class again without your work. I am getting tired of this. You are going to do your work."

TC--'Why do you not have your stocks? I told you to keep a record for a week. Tomorrow I sm going to walk around and look to see if you have them. Why do I have to walk around and check on you?"

TC--'Now stop talking and get busy."
TC--"This is the easiest pop test $I$ could have given you. If you don't study, I just don't know what to do about it."

TC--'You didn't read this chapter, did you? I should have given you a test?"

TC--'You can expect a pop test tomorrow. Have Checking Your Reading completed. If you have one question unanswered, you get a zero. The less you participate, the more tests you will have."

## Student-Centered Class

The following teacher comments were recorded in the studentcentered Introduction to Basic Business class.

Dates
August 28, 1974

## Comment 8

OC--The following coments were made to the class as a whole in most situations.

TC--'In this class, I will become one of you. We'11 learn lots of things together."

TC--"Isn't this the only class you've ever had in which you were given a chance to do whatever you wanted to do in an area?"

TC--"Do you think you're going to like it?"

## Dates

August 29, 1974

September 19, 1974

October 10, 1974

## Comments

TC--"I hope you have thought about an area in which you might like to begin. Move around to the various activity centers and explore the materials."

TC--'You may sit anywhere you'd like and look over the materials."

TC--'Do you think you're going to like to work on your own?"

SC--(Student response.) 'Yes, if I can get started. It is harder to 'do your own thing' than you think."

TC--"I think some of you are working too slowly."

TC--"I am going to talk to some individuals today. Some of you are wasting time and you must stop. If you can't find an activity, I'll help you."

## STUDENT AND TEACHER REACTION

The teacher and the students in each class were asked to prepare written reactions at various points during the semester. In addition, the teacher and the students were also asked to keep a journal of their reactions, impressions, and feelings about the course, the subject matter, the teaching methods, and the learning environment. The students, as well as the teacher, were encouraged to write in the journals on a daily basis, if desired, or at least once upon completion of each topic area.

The journals were collected three times during the semester and at the end. In many cases, the students simply recorded the activities in which they had been involved and did not reveal their reactions or feelings. However, in some cases, the students were more open about their
feelings and impressions. The teacher usually presented her comments orally to the researcher and notes were recorded.

Reactions in the following section were extracted from the student and teacher journals and from the reaction questionnaires distributed to the students and the teacher in October and January. The comments revealed the feelings, the likes and dislikes of some of the students In each of the two classes, as well as the impressions of the teacher. The comments are quoted verbatim.

## Teacher Reaction

The following comments revealed the teacher reaction as the semester progressed.

## Dates

August 27, 1974

August 28, 1974

September 3, 1974

September 6, 1974

Comments
OC--The teacher had agreed to implement the student-centered plan. However, she became very apprehensive on the day before the plan was to be initiated. She called the researcher and asked her to come and go over the plan once more. After another explanation, she seemed more confident.

OC--This was the first day the classes met. The teacher seemed very excited about both classes and explained the procedure clearly.

OC--The teacher told me today that "as soon as classes start, 'all those in French and math who could not make it' would be placed in her basic business classes."

OC--The teacher told me today that she will not mind having visitors in the student-centered class, but she thinks that they will be bored in the traditional class.

OC--The teacher told me today that she has a much better attitude about the basic business classes this year. She said, "I even

| Dates | Comments |
| :---: | :---: |
| September 6, 1974 | OC-- (continued) like the traditional one. They seem to be better than basic business students in the past." |
| September 24, 1974 | OC--The teacher told me today that she thinks the students like the student-centered class. |
| September 26, 1974 | OC--The teacher told me today that one boy had disliked her very much last year in study hall and this semester he is in the studentcentered class. She said, "Rapport is good with this student this year.' |
| October 10, 1974 | OC--She told me that she thinks some of the students in the student-centered class are working too slowly and that she is going to talk with them. |
| November 7, 1974 | OC--The teacher was absent yesterday due to illness. She said today that she thinks the student-centered plan works quite well when a substitute teacher must fill in because the students do not have to stop their work. |
| November 14, 1974 | OC--The teacher thinks there is a decrease in enthusiasm in the student-centered class. |
| November 18, 1974 | OC--The teacher said, "The students were all very excited about the group presentation idea." (Student-centered class) |
| December 12, 1974 | OC--The teacher told me that she feels that the students are enthusiastic again now and there is no problem. |

The following statement was written by the teacher in January,
1975, just prior to the end of the first semester. (Verbatim)
I was slightly apprehensive when $I$ was first approached about the student-centered class concept. I had reservations about possible discipline problems because of the completely informal atmosphere in the classroom. I was also concerned about some students possibly not learning anything because $I$ was afraid they would do nothing.
"My fears were unfounded completely. I am pleasantly surprised at the lack of discipline problems--almost nonexistent. I have had to move a couple of students away from other students, but this is certainly a very minor thing and certainly not a problem. And most of the students worked hard. They get involved in their projects and turn in activities that show planning and research. I have observed that the two types of students who have benefitted greatly in this class are the highly motivated students and the students with learning disabilities. The highly motivated students have really taken advantage of being able to 'do their own thing' and they have done it well. The slow learners have also done well, doing work on their own level. They have felt a sense of accomplishment that many of them haven't experienced before. I feel for the most part, the average students have remained average.

With many different activities available for the students to do and with an abundance of research materials in the classroom, I think this type class is not only workable, but highly motivational and successful.

The traditional class was also a good class. The students seemed more interested than those in the past. I think that part of this was caused by my attitude toward them. I think I liked them better this semester because of the excitement from the other class. Even though the class was better than usual, most of the students still felt bored on many occasions during the semester. I want to try some of the ideas from the student-centered class in this class next semester and I plan to use the same plan in both classes next year, if I teach the course. The students in this class did not have an opportunity to work on what they wanted to. We all worked together and the major part of the grade was a test grade average. Therefore, there were four F's in this class and there were none in the other class. Some students just do not do well on tests and when that is the only way to earn a grade, it is difficult. I think many of the students in this class would benefit from a class like the student-centered class."

## Traditional Class

The following comments were taken from student journals in the traditional class and represent feelings at various times throughout the semester: (Verbatim)
"Class discussion was pretty boring without other people's opinions."
"Basic business, I believe, should be required before biology. This is to help Americans in everyday life. Biology isn't that important."
"Class was all right today, but it wasn't the best."
"We had an interesting class today."
"I thought the class was good today. I like doing this group thing for now, but $I$ don't know about it later on. Hope it stays the same."
'I thought class was boring today. I don't like bringing in advertisements. I don't like getting up in front of a class either."
'I thought class was dull today. Our class conversation was dull today. Hope it is better next time."
"I liked class today; it was very interesting. I like being in our groups."
"Class was a little better today. The class was taking part in what was happening."
"Class was okay today. It was just as usual. This unit was okay. I guess it was pretty much the same as usual."
"Our group is tired of being cut down every day and every time we have class questions. It is not fair and is not right for you to cut down everybody."
"Today we went over the chapter on credit. We took notes. It was a little boring today."
"Today we talked; it was sort of boring, but it was OK."
'I didn't like today because I'm tired of this class. It doesn't interest me anymore. I don't know what $I$ took it for."
"It was all right today, but I'm not crazy over it."
'We got into our groups and reviewed for a test. I like it when we get into our basic business groups because it's more interesting and not boring."
"We did questions on Chapter 11 today-wwas boring."
'We went over Chapter 15 and we reviewed for a test. It wasn't as boring in class today."
'I don't like this unit--it is very boring. We're just reviewing the same chapters."
'Teacher wasn't at school today. We didn't do anything except read. It was a good day in class."
'We sat all period and went over our questions. I didn't like it. It's getting to be very boring. I guess maybe it will change when we take up another unit. I hope it will not be boring."
'Teacher was out again today. Did nothing in class. Good day."
'Today was really boring. We didn't do that much. I think everybody had the Monday Morning Blahs."
'We didn't do much in class today. We read and she gave us the Checking Your Reading questions. We had a pop test and I didn't like it. She gave us a lecture on why we should come to class prepared to work. It was a mediocre day."
'Today is the day for the 'fifties' style. We saw a film three guys in the other basic business class made. It was a good movie with a lot of meaning. I gave them an A+. It was a good day in class. Everyone was pretty wide awake."

The following coments were taken from the October reaction questionnaires in the traditional class: (Verbatim)
"I think the course is coming along just fine, except $I$ hate coming in here because I don't like the course. At the first I really liked coming in here. But now it has changed and I don't really know why."
"I'm not doing well at all this time. I don't care too much about this class. I can't seem to want to study."
"This class is coming along fair."
'This class is about the easiest I have. It's also about the best one I have. I think this course should be required for everybody."
"I like this course a lot. I have enjoyed it a lot. I have learned a lot that I did not know before."
'Basic business class is OK. We seem to have a good time, but at times it seems to get worse. It's not the course I thought I signed up for."
'I have tried my best in this course, but this nine weeks it isn't coming along too good. I am trying to pass."
"Progressing better now that we are getting used to it."
"This class is going to be the same as usual. When I study for a test I get all mixed up. I can't think of the answer even when $I$ know
it. You think I don't study, but I really do. I just can't get it to stick in my mind. I am really trying. But $I$ am not good in school. If I understood it more, I could do better maybe."

The following comments were taken from the reaction questionnaires in January: (Verbatim)
"This course has been all right this semester. I have had the most fun in our groups. Some of the things have been fun. Then others I have not liked. At times I have hated to even come to this class."
"I do like this course. I have enjoyed things we have done in the class. You have made it very interesting so far, except for a few exceptions. Our class discussion is good when everyone gets in and contributes something."
"It was fair and sometimes cloudy. I don't really like this class."

## Student-Centered C1ass

The following excerpts were taken from student journals in the student-centered class at various points throughout the semester: (Verbatim)
'The teacher was talking to the class today. She's doing our class different and I really think I'm going to like it in here."
"I started on a new activity yesterday, and from what we've done so far, I really do like it."
"To tell you the truth, I am going to be honest, I really don't like this kind of class because I'm afraid I'll let my work slip."
"I feel the same about this method today, but lately, I have found myself busy."
"I'm getting to enjoy it a little bit better now and I really don't have any artistic ability, but we're trying."
"I worked on my report today and read some in a book. I am enjoying what $I$ am doing and $I$ am learning a lot about economics."
'Today I had trouble deciding what activity to do because none of them seemed very interesting."
"I think I an learning a lot from this class because we can do what we want to do and what we like to do."
"Today we saw a film made by three boys in the class for their group presentation. It was a very good film and I thoroughly enjoyed it."
"I finally got my first contract turned in and now I know what it is that I am going to do."
"I am very upset. I haven't gotten any of my activities turned in and I should have had them in days ago. I'm mad at myself and really want to try on the next topic because this class is the best I have and the teacher is very nice. When I make stupid mistakes like this it is really hard to take and it makes me wish I had done what I had intended and should have done."
"Started a new activity today. Working hard!"
"Today I began an activity on no-fault insurance. So far, it is interesting and $I$ am enjoying it."
"I am enjoying this class right much. It is interesting and it is better than having a teacher teach you."

The following coments were taken from the reaction questionnaires in the student-centered class in October: (Verbatim)
"I need to do a few more activities, but other than that things are working out 0 K . I have learned many things from the activities people have done in here. It's also a very enjoyable class."
"I haven't been doing so hot lately in this course, but I do believe that I am beginning to pick up."
"This course is going great. At the first of the year, I thought that $I$ wouldn't like it. But, now I wouldn't take anything for the experiences and the things $I$ have learned. Before $I$ took this course I couldn't talk to businessmen, but now I can go in a bank or business and talk to the manager like I have been doing it all my life."
"I like this class and I think it is interesting. I like being able to do what $I$ want to do, and not having a teacher to lecture while we take notes."
"This basic business class is something different. I like it a lot."
"I think this is a good class, but I think some of the areas require too much outside work."
"This is a great class. It's the first year anything of this sort has taken place at Trinity. I think that there should be more classes like this. You can learn at your pace. People can learn from one another."
"I like this class. You learn a lot and it's fun. If you work hard and listen in class, you learn a lot about what is going on in the world today."
"I think basic business this way is more educational, because you have to read a lot to get your information. My last two topics, even though I haven't turned in as many projects, have been my best in my opinion. I believe this because I've read more and to me I feel like I know more."
"The things you study in here are something everyone should know something about before getting out of high school. I like how this class is operated as far as getting to do more of what we want. I don't think I would like it at all if it were just a regular class as the others have. I had a class last year which was very similar to this one in what you study, but it was a regular class and was very boring."
"I don't know if I'm doing so hot or not, but I like it."
The following comments were taken from the reaction questionnaires
in the student-centered class in January: (Verbatim)
"I've begun to enjoy this class a lot and I've learned a lot from it. My favorite topic area was Government, Business, and Labor. I've found out many new things about it that I didn't know before. I am looking forward to the second half of this course. Many things $I$ have done, but I want to go back and do differently. I've enjoyed this work in the community that $I$ have done in many different places. So I am sure I will enjoy the second half of the year."
"This type of class is okay, and I think that you can get more knowledge out of a class like this than a regular classroom study design. I like choosing the particular thing that I want to report on."
"Overall I think this course and the way you operate it should be expanded. Because doing it this way, I think students are willing to do more. This course is very good because I've had the chance to talk to business managers and learn more about their businesses, and get a grade at the same time."
"At first, I didn't like this course. It was probably because I didn't understand what we were doing. Now that I know, I enjoy it. It gives us a chance to really learn instead of just reading about it."
"This first semester has been the best class I have ever been in before. I have learned about subjects I wouldn't have dreamed about learning if $I$ wasn't in this class. I have learned about people and how to talk to real businessmen and women and to be able to understand them. I have really learned about the responsibilities of having to do something on your own. I have also learned how it feels to really love something that you and your classmates have made, like our film. When making the film, I experienced the feeling of dishing out money for a project and not thinking twice about doing it. Sometimes I have gone without lunch to buy something for the film. I hope the last semester will be as meaningful as the first."
'This semester has been a very interesting one and although $I$ really didn't get much done, I think it was a fun class so far. The people in the class are all right and we joke and carry on once in a while. I should have done more, but I might as well face the fact that I'm lazy."
"This course seemed a little strange at first--on how we were going to be taught and at first I didn't quite understand it. But during these past weeks, I began understanding it and liking it. There are times when I would rather hang it up, but for the most part I enjoy it. This course allows you to do what you want and learn at the same time. It's not like the other classes where you go straight through the book-in here you have a type of freedom that doesn't make you feel bogged down. I just hope the next semester will be just like the first!"
'I've really enjoyed this class so far this year. It's really been great. I hope to work harder next semester and get more involved. The reason this class was easier to me is because you can do your own thing any way you want it. You've got a lot of freedom. I like interviewing at different places. I also believe a person can learn more on his own than by a teacher teaching. That's the way I feel now. This class has been a lot of fun. I wish they had more classes like it."
"The first semester of this course was very enjoyable. I learned a great deal about the community and its surroundings. I feel like if there were more classes like this, there wouldn't be as many dropouts. I hope this class will prove to work."
'This first semester was very enjoyable to me. I think that I have learned a lot from this class and will continue to do so in the upcoming semester. When I first got in this class, I thought it was going to be boring, like all the rest of my classes. But after I got through with my first couple of topics, I really enjoyed it thoroughly. I don't think there is any way to change this class or make it better. It is already a student's dream. All the classmates are friendly, the teacher is nice. I just really like it. It is 100 percent better than any of the rest of my classes."
"At the first of the year, 1 just knew this class was going to be a bore. But as time passed, I changed my mind. There have been
times when $I$ wanted out of here and $I$ didn't want to come in here either. But the class started getting really good. Sometimes I dreaded coming in here and doing work, but I guess everybody is like that at times. I have enjoyed being in here, but I hope the next semester will be even better."

## Chapter 6

## DISCUSSION OF FINDINGS

The problem of this study, as stated in Chapter 1, was to develop a student-centered teaching plan for the Introduction to Basic Business course. Student achievement was measured through the use of the Test of Understanding in Personal Economics, published by the Joint Council on Economic Education. Student attitude was measured by a semantic differential developed by the researcher. Several anthropological research techniques, including interviews, observations, and journals, were used to collect additional information relating to teacher and student reaction.

Two Introduction to Basic Business classes at Trinity Senior High School in Trinity, North Carolina, participated in the study. The traditional class was composed of twenty students, while the student-centered class was made up of twenty-three. The same teacher was responsible for both classes.

## Student Achievement

The Test of Understanding in Personal Economics was administered to the students in the traditional and student-centered classes as a pretest at the beginning of the semester. The test consisted of 50 multiplechoice items. The mean pre-test score in the traditional class was 18.9000. The mean pre-test score in the student-centered class was 18.6087. On the basis of the pre-test means, the traditional class scored slightly
higher, . 30 , than the student-centered class. The post-test was administered at the end of the semester. The post-test mean for the traditional class was 22.8000 , while the student-centered class achieved a post-test mean of 22.2174 . The means were adjusted for the covariate (the pre-test score) and the following adjusted post-test means were obtained: Traditional Class $(n=20), 22.6330$; and Student-centered Class $(n=23), 22.3626$. The adjusted post-test means revealed a slightly higher mean, .27 , in the traditional class. An analysis of covariance, with the pre-test score as the covariate, yielded an F-ratio of .04703 , which was not significant at the . 05 level. The hypothesis of "no significant difference in achievement in the two classes" was accepted.

The two Introduction to Basic Business teaching plans were different in organization and implementation. The traditional plan was teacherdirected, with the teacher making all the decisions relating to objectives, activities, and classroom procedures. The student-centered plan focused on the student. The student determined his own objectives, selected his activities, and pursued them in whatever manner he chose. However, the students in both the traditional and the student-centered classes achieved higher mean scores on the post-test than the pre-test and the amount of increase was approximately the same.

There was an increase in knowledge about basic business, as measured by the specific instrument, in both classes during the semester. The students in the student-centered class, determining their own objectives and selecting their own activities, demonstrated approximately the same amount of achievement gain as the students in the traditional class,
which was totally teacher-directed and controlled. Both classes increased and, on the basis of the statistical analysis, there was no significant difference in the amount of achievement gain. The student-centered plan was as effective in achievement gain as the traditional plan.

## Student Attitude

A semantic differential, developed by the researcher, was administered to the students in the traditional and the student-centered classes as a pre-test at the beginning of the semester. The instrument consisted of seven concepts (Community, School, Basic Business Course, Basic Business Classmates, Teaching, Learning, and Me) and twelve bipolar adjectives. A seven-point scale, with seven as positive and one as negative, was employed. The semantic differential was administered three times (October, December, and January) during the semester. Each of the seven concepts was analyzed individually through a two-way analysis of covariance with repeated measures. The pre-test score was identified as the covariate to be used with each of the three succeeding rating scores. The two factors were as follows: (1) between subject factor (teaching plans), and (2) within subject factor ( $R$, repeated testing).

The statistical analysis yielded three F-ratios for each concept and provided answers, on the basis of the specific instrument, to the following questions: (1) Was there a significant difference between classes in student attitude relating to each concept? (2) Was there a significant difference in attitude in the testing over both groups? and (3) Did the two groups react in the same way as they progressed through the testings?

The following F-ratios were obtained for each concept relating to differences in attitude between groups: Commanity, .0503; School, .0211; Basic Business Course, . 0712; Basic Business Classmates, . 1040; Teaching, . 2017; Learning, . 0177; and Me, .3656. The seven F-ratios were not significant at the .05 criterion level. Therefore, the hypothesis relating to significant differences in student attitude between groups toward the seven concepts was rejected.

Obtained $F$-ratios for each of the seven concepts in determining differences in student attitude in the testing over both groups were as follows: Community, 5.9387; School, . 8285; Basic Business Course, 1.5616; Basic Business Classmates, .0612; Teaching, . 0084 ; Learning, 1.9867; and Me, .8753. The F-ratio, 5.9387, for Community was significant at the .05 level. The remaining F-ratios were not significant at the . 05 level. The adjusted post-tests means indicated the differences in attitude in the two classes relating to Community: Traditional-Test No. 2, 5.3278; Test No. 3, 5.4953; Test No. 4, 5.5238; and Student-centered--Test No. 2, 4.8989; Test No. 3, 4.8811; Test No. 4, 5.3845. There was a difference in student attitude toward the community in the amount of increase over the three testings in the student-centered class when compared to the traditional class. The overall hypothesis of significant differences in student attitude toward the seven concepts in the testing over both groups was rejected.

The analysis to determine if the two groups reacted in the same way as they progressed through the testings resulted in the following F-ratios for each concept: Commanity, 2.4463; School, 1.3127; Basic

Business Course, 1.5225; Basic Business Classmates, 1.7676; Teaching, .4993; Learning, 1.4360; and Me, .7402. The obtained F-ratios for each concept relating to the way in which the students reacted as they progressed through the testing were not significant at the . 05 level. The hypothesis relating to differences in student attitude was rejected. Although the F-ratios obtained in the statistical analysis of the concepts were not significant, the adjusted post-tests means for the two classes revealed several important findings. The adjusted means for each of the testings in the traditional and the student-centered classes indicated the various changes in student attitude as the semester progressed.

The adjusted post-tests means for Community in the traditional and the student-centered classes were as follows: Traditional--Test No. 2, 5.3278; Test No. 3, 5.4953; Test No. 4, 5.5238; and Student-centered-Test No. 2, 4.8989; Test No. 3, 4.8811; Test No. 4, 5.3845. The traditional class showed an increase of +.1675 on Test No. 3 and an increase of +.0285 on Test No. 4. The student-centered class showed a decrease of -.0178 on Test No. 3 and an increase of +.5034 on Test No. 4. The traditional class showed a continuous increase on each successive testing date, while the ratings of the student-centered class declined on the third testing but Increased on the fourth testing date. A comparison of the two sets of adjusted post-tests means revealed a final higher rating of Comunity by the traditional class, but a greater amount of increase by the studentcentered class as the semester progressed.

The adjusted post-tests means for School in each of the classes were as follows: Traditional--Test No. 2, 5.3689; Test No. 3, 5.4809; Test No. 4, 5.3549; and Student-centered--Test No. 2, 5.3353; Test No. 3, 5.3910; Test No. 4, 5.6840. The traditional class showed an increase of +. 1120 on Test No. 3, but a decrease of $\mathbf{- .} 1260$ on Test No. 4. The studentcentered class increased by +.0557 on Test No. 3 and by +.2930 on Test No. 4. The changes in the two classes revealed an overall increase in the student-centered class and a gradual decline in the traditional. The final post-test means were also higher in the student-centered class.

Adjusted post-tests means for the Basic Business Course were summarized as follows: Traditional--Test No. 2, 5.5859; Test No. 3, 5.4314; Test No. 4, 5.5449; and Student-centered--Test No. 2, 5.3349; Test No. 3, 5.4823; Test No. 4, 5.7736. The adjusted post-tests means in the traditional class revealed a decrease of -.1545 on the third testing date and an increase of +.1135 on the fourth testing date, while the adjusted post-tests means in the student-centered class showed an increase on the third and fourth testing dates of +.1474 and +.2913, respectively. The adjusted post-tests means in the student-centered class increased steadily throughout the semester, while the traditional adjusted means indicated a decrease on the third rating date and an increase at the fourth testing. The final adjusted post-tests means in the two classes revealed a more positive rating in the student-centered class and an overall increase as compared with an overall decrease in the traditional class.

The adjusted post-tests means for Basic Business Classmates were as follows: Traditional--Test No. 2, 5.8326; Test No. 3, 5.7521; Test

No. 4, 5.6661; and Student-centered--Test No. 2, 5.6103; Test No. 3, 5.7282; Test No. 4, 5.8169. The post-tests means in the traditional class showed a decrease on the third, -.0805, and fourth, -.0860 , testing dates, while the post-tests means in the student-centered class increased on the two dates by +.1179 and +.0887 , respectively. The traditional class showed a consistent decrease in ratings as compared with a consistent increase in ratings in the student-centered class. On the final testing date, the two adjusted post-tests means revealed a higher rating for Basic Business Classmates by the student-centered class.

Adjusted post-tests means for Teaching for the traditional and the student-centered classes were as follows: Traditional--Test No. 2, 5.7740; Test No. 3, 5.7230; Test No. 4, 5.6280; and Student-centered-Test No. 2, 5.5522; Test No. 3, 5.5817; Test No. 4, 5.6491. The decreases of -.9510 on the third testing date and -.0950 on the fourth testing date represented an overall decrease in ratings in the traditional class. The adjusted post-tests means in the student-centered class showed gradual increases of +.0295 on the third testing date and +.0674 on the fourth testing date. A comparison of the changes in the two classes revealed that the student-centered class increased as the traditional class decreased. The final adjusted post-tests means for the student-centered class indicated a higher rating for Teaching than the rating in the traditional class.

The adjusted post-tests means for the concept of Learning were as follows: Traditional--Test No. 2, 5.2265; Test No. 3, 5.1765; Test No. 4, 5.2265; and Student-centered--Test No. 2, 5.0639; Test No. 3,
5.1074; Test No. 4, 5.4987. In the traditional class, the adjusted posttests means decreased on the third testing date by -.0500 and increased on the fourth testing date by +.0500. The student-centered adjusted posttests means increased by +.0435 on the third testing date and +.3913 on the fourth testing date. A comparison of the changes in the two classes showed an overall increase in the student-centered class, while the traditional class, overall, remained the same. The final post-tests means indicated a higher rating in the student-centered class than in the traditional class.

After adjustment, the post-tests means for "Me" were as follows: Traditional--Test No. 2, 5.4158; Test No. 3, 5.4648; Test No. 4, 5.4153; and Student-centered--Test No. 2, 5.1828; Test No. 3, 5.3493; Test No. 4, 5.4836. The adjusted post-tests means for the traditional class increased by +.0490 on Test No. 3, and decreased by -. 0495 on Test No. 4. The adjusted post-tests means in the student-centered class increased on Test No. 3 by +.1665 and again on Test No. 4 by +.1343 . The overall change revealed in the student-centered class was an increase as compared to an overall decrease in the traditional class. The post-tests means in the student-centered class showed a higher final rating, as well as a greater amount of progressive increase on each of the three testing dates.

The overall trend indicated by the concept ratings, summarized in Table 28, was a general increase in ratings on each successive testing date by the student-centered class, while the traditional class showed a general decrease in ratings on the successive testing dates. The final adjusted post-tests means were also higher in the student-centered class than the traditional class on all concepts except Community.

Table 28
Summary of Attitude Changes in the Traditional and Student-Centered Classes

| Concept | Traditional Class |  | Student-Centered Class |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Oct.-Dec. | Dec.-Jan. | Oct.-Dec. | Dec.-Jan. |
| Conmaunity | + | + | - | + |
| School | + | - | + | + |
| Basic Business Course | - | + | + | + |
| Basic Business Classmates | - | - | + | + |
| Teaching | - | - | + | + |
| Learning | - | + | + | + |
| Me | + | - | + | + |

The statistical analysis of the semantic differential revealed that there were no significant differences in the two classes in student attitude toward the seven concepts. The journal comments recorded by the students in each of the two classes, presented in the findings, did not appear to support the data obtained through the use of the semantic differential. The journal coments from the students in the traditional class included such expressions as the following: "the class is boring," "we always do the same things," "the material is not interesting," "the teacher is unfair," and "school is boring." However, as illustrated in the findings, the students in the traditional class indicated positive attitudes relating to the seven concepts in the semantic differential.

Journal comments recorded by the students in the student-centered class included the following: "the class is fun," "the class is interesting," "the teacher trusts us," "the material is interesting," and "we're learning more than just facts." The students in this class also indicated positive attitudes toward the seven concepts in the semantic differential. The adjusted post-test means for the semantic differential on Test No. 4 (the end of the semester) in both classes revealed ratings on each of the seven concepts of 5.00 or higher, which indicated positive attitudes in both classes. The point here is not to challenge the validity or the reliability of the semantic differential for revealing changes in attitude. However, when rating concepts on the semantic differential, the students may have a tendency to "rate the concepts as they think the teacher wants them rated." (See Appendix J.) This factor should be considered when interpreting the findings.

## Factual Data

A comparison was made of the factual data recorded in the traditional and the student-centered Introduction to Basic Business classes. The traditional class was composed of twenty students; the studentcentered class consisted of twenty-three. There were 129 absences, an average of 6.45 days per student, in the traditional class as compared with 111 , an average of 4.83 days per student, in the student-centered class. In both classes, there were seven instances of tardiness.

The grades earned in each of the two classes also represented a contrast. In the traditional class, five students earned an " $A$ " for the
semester, while four students earned an "F." In the student-centered class, four students earned an " $A$ " for the semester and there were no "F's." On a comparative basis, the student-centered class, with a larger enrollment, had fewer absences than the traditional class, and there was one less " $A$ " in the student-centered class, but no one earned an " F. "

On the basis of student activity, the traditional class members, in general, participated as a whole as they listened to lectures, answered questions, and were administered tests. The students in the studentcentered class completed 458 activities and, in general, these were pursued on an individual or small-group basis. On the basis of these data, there was much more active student involvement in the learning experiences in the student-centered class.

Achievement, Attitude, and Activities of Selected Students in the Traditional and Student-Centered Classes

Three students from the traditional class and the student-centered class were selected to present an in-depth description of students of various abilities.

Highest score on the achievement post-test. The student in the traditional class achieving the highest score on the achievement post-test was identified as Student A-1, a l6-year-old male student classified as a sophomore. He achieved a post-test score of 33 out of a possible 50 points, an increase of two points over the pre-test score. Student A-1 was absent a total of three days during the semester and earned a grade of $A$ for the semester. The overall ratings of Student $A-1$ on the seven concepts of the semantic
differential indicated that during the semester there was a decrease in positive attitude toward Community, Basic Business Course, and Me. However, he indicated an increase in positive attitude on School and Teaching, while there was no change in his ratings of Basic Business Course and Learning.

Student A-2, a 17-year-old male classified as a junior, the student achieving the highest score on the achievement post-test in the studentcentered class, increased from a score of 30 out of a possible 50 points on the pre-test to a score of 38 on the post-test, an increase of eight points. During the semester, Student A-2 was absent from class two days. He completed a total of twenty-three learning activities and earned a grade of $B$ for the semester. In rating the seven concepts on the semantic differential, Student A-2 revealed an overall favorable increase in attitude on all concepts from the pre-test to the final post-test dates.

A comparison of the findings for Student $A-1$ (Traditional) and A-2 (Student-centered) revealed that the highest score on the achievement post-test and the greatest amount of increase in points was achieved by the student in the student-centered class. However, Student A-1 received an $A$ for the semester grade and Student $A-2$ received a $B$. Attitude change, as measured by the semantic differential, revealed a consistent increase in attitude from pre-test to final post-test dates for Student A-2, while Student A-1 decreased in positive attitude toward three concepts and indicated no change on two.

Lowest semester grade earned. The student earning the lowest semester grade in the traditional class was identified as Student B-1, a 16-year-old
female classified as a sophomore. She earned a semester grade of $F$ and had the lowest overall grade average in the traditional class. On the achievement post-test, Student B-1 increased to a score of 18 out of a possible 50 points, an increase of one point over the pre-test score. She was absent four days during the semester. Student B-1 indicated an increase in positive attitude on the semantic differential toward Commanity, School, Learning, and Teaching. However, there was a decrease in positive attitude toward the Basic Business Course, Basic Business Classmates, and Me.

Student B-2, a 17-year-old male student classified as a junior, earned the lowest semester grade in the student-centered class. During the semester, he completed thirteen learning activities and earned a semester grade of $D$, which was the only $D$ in the student-centered class. On the achievement post-test, Student B-2 achieved a score of 33, which represented an increase of thirteen points over his pre-test score, and was the highest increase in the student-centered or the traditional class. Student B-2 was absent from class a total of five days during the semester. On the semantic differential, he indicated a positive increase in attitude on Community, School, Basic Business Course, Teaching, and Me as the semester progressed. There was a decrease in post-test attitude toward two concepts.

A comparison of the findings for the two students revealed that Student B-1 (Traditional) earned a semester grade of $F$, one of four in the traditional class, while Student $\mathrm{B}-2$ (Student-centered) earned a semester grade of $D$, the only $D$ in the student-centered class. The student
in the traditional class increased in achievement on the post-test by one point over the pre-test score; the student in the student-centered class increased by a total of thirteen points over his pre-test score. The thirteen-point increase by Student $B-2$ represented the greatest amount of increase in the two classes. Student B-1 indicated a positive increase in attitude on the semantic differential on four of the seven concepts, but a decrease in positive attitude toward the Basic Business Course, Basic Business Classmates, and Me. Semantic differential ratings for Student B-2 revealed that there was a favorable increase in attitude toward five of the concepts and a decrease in attitude toward Basic Business Classmates and Learning.

Brother-sister pair. Student C-1 (Traditional) was a 17-year-old female classified as a sophomore. She was absent from class one day during the semester. Student C-1 achieved a score of 18 out of a possible 50 points on the achievement post-test, an increase of two points over the pre-test score. She earned a semester grade of $F$. Semantic differential ratings indicated that Student $C-1$ showed a favorable increase in attitude toward Teaching, Learning, and Me as the semester progressed. However, there was a decrease in attitude toward Community, School, Basic Business Course, and Basic Business Classmates from pre-tests to final post-tests dates. Student C-2 (Student-centered), a 16-year-old male classified as a sophomore, was absent from class a total of five days. His achievement pre-test and post-test scores were identical (22 out of a possible 50 points). Student $C-2$ completed twenty-four learning activities during the
semester and received a grade for the semester of $C$. On the semantic differential, Student C-2 indicated an increase in positive attitude toward Community, Basic Business Classmates, Learning, and Me as the semester progressed. Ratings for School and Basic Business Course decreased and there was no change for Teaching,

A comparison of the findings for the brother-sister pair indicated that Student C-2 (Student-centered, brother) earned a semester grade of $C$, while Student C-1 (Traditional, sister) earned a semester grade of $F$. Student C-2 also achieved a higher pre-test and post-test achievement score. The final post-tests scores for Student C-1 indicated an increase in positive attitude toward Teaching, Learning, and Me and a decrease in attitude toward the remaining four concepts. Student C-2 indicated a favorable increase in positive attitude toward Commanity, Basic Business Classmates, Learning, and Me and a decrease in attitude toward School and Basic Business Course.

## Anthropological Techniques

The comments recorded by the students and the teacher, as presented in Chapter 5, revealed some of the thoughts, feelings, and attitudes relating to the two Introduction to Basic Business classes. The excerpts from the researcher's observation notes and from interviews with the students and the teacher indicated her impressions of the experiences taking place in both classes.

Researcher's observation notes. As revealed in Chapter 5, the traditional Introduction to Basic Business class was teacher-directed and controlled.

The teaching method was basically lecture and discussion, with the teacher asking the questions and the students providing the answers. The atmosphere was very formal and the students remained in their seats throughout the class periods. The teacher sat at her desk during the entire class period on most of the days on which the observer visited the class. The principal came into the room on two occasions, but there was no interaction with the teacher or the students. There was no opportunity for the researcher to talk with the students in the traditional class.

The student-centered class had a very informal atmosphere. The teacher worked with students individually or in groups and seldom sat at her desk. There was constant activity during most class periods. The students talked among themselves, to the teacher, and to the researcher. Numerous types of activities were pursued by the students. The researcher had many opportunities to talk with the students in this class. The student comments, presented in Chapter 5, represented responses from fourteen different students and indicated that, in general, the students enjoyed the freedom of the student-centered plan. There were also a number of visitors in the class when reports of interest were presented. The principal visited the class several times and talked with various students about their activities. He appeared to be enthusiastic about the student-centered plan. Several members of the Business Education Department also visited the class at various times throughout the semester.

Teacher comments. The "teacher comments" presented in Chapter 5 were recorded by the observer in the traditional and the student-centered

Introduction to Basic Business classes. These comments appeared to reveal the atmosphere of the learning environment in each class. The number of comments in each of the two classes, as well as the tone of the teacher, were quite different.

The traditional class was conducted on a formal basis. The teacher directed all the activities of the students. From the comments made to the class, it appeared that the teacher grew increasingly disappointed with the students as the semester progressed. On the basis of the teacher comments, the students did not read the assigned materials and on many occasions were unable to answer questions in class. The comments indicated that the teacher found it necessary to reprimand the students on numerous occasions.

The comments made by the teacher in the student-centered class were in contrast to those in the traditional class. The class was conducted on an informal basis. In most situations, when the teacher talked to the group as a whole, it was for explanation purposes. However, at various times, the teacher did work with students individually when they appeared to have difficulties in selecting activities. There were very few general teacher comments in the student-centered class.

Teacher reaction. The teacher recorded her thoughts and reactions relating to each class in a journal and also talked freely with the researcher about her feelings. She was asked to complete a reaction questionnaire at various points throughout the semester. The comments in Chapter 5 indicated that the teacher was apprehensive about the student-centered plan just prior to the opening of school. However, she was enthusiastic on the first day of class.

As the semester progressed, the teacher informed the researcher that she "liked the student-centered class very much and that she even liked the traditional class better than usual." At various times, the teacher felt that the enthusiasm and motivation of the students in the student-centered class were wearing off. However, it was restored on each occasion. By the end of the semester, the teacher had decided to continue the student-centered plan during the second semester and to incorporate as much of it as possible in the traditional class during the next semester. She also indicated that she would follow the same plan next year.

Student journals. The students in both classes were asked to keep a journal of their thoughts, feelings, and reactions relating to the Introduction to Basic Business classes. Several of the students appeared to be "open" in their comments in the journals and in completing the reaction questionnaires.

The students in the traditional class, in general, as indicated in the "student comments" in Chapter 5, described the course as boring, dull, and uninteresting. However, some of the students in the traditional class appeared to like the course and expressed positive feelings and reactions in their journal notes.

The students in the student-centered class appeared to be much more "open" than those in the traditional class. As indicated in the "student comments," in general, the students enjoyed the class and praised it highly. They seemed particularly pleased with the freedom that they were allowed in selecting their own activities and with the opportunity to become actively involved in "real" commnity experiences.

Indications of "incidental" learning in the student-centered class. On many occasions throughout the semester, the students in the studentcentered class presented oral reports relating to activities they had completed. As the oral presentations were made, the observer realized that some of the students were making statements that revealed various types of activities and learning that generally are not obvious in the more traditional Introduction to Basic Business classes. Some of the comments that indicated that "incidental" learning was taking place are presented as follows: (The comments are quoted verbatim.)

## Dates

September 9, 1974

September 12, 1974

September 19, 1974

Comments
OC--A student was making an oral presentation on pollution controls set by the local and state governments.

SC--"I was noticing the other day the big trucks that go by my house and how much noise they make. I really hadn't thought much about it until I talked to some of the local officials while I was collecting information for my project."

OC--A student was making an oral report on the Federal Reserve System.

SC--"One day last week I was reading an article in the newspaper in which President Ford was talking about the reserves in the Federal Reserve Banks and the part this plays in inflation."

OC--A student was presenting an oral report on the Better Business Bureau.

SC--"Some of the advertisements sometimes come very close to breaking the Bait and Switch Law, which says that a store cannot use some ad on a cheap price to get you into the store and then try to sell you something that costs a lot more."

## Dates

September 24, 1974

October 3, 1974

October 16, 1974

October 29, 1974

## Comment 8

OC--A student was making an oral report on air pollution.

SC--"I saw a Senator from Wisconsin last night on television discussing some of the costs of controlling air pollution. Just yesterday, I was at a service station and they were burning trash behind the station and there was a lot of black smoke. I went in and asked them why they were doing this? They said they didn't have any other way to get rid of it. They said they had been trying to bury it, but there was no space."

SC-Another student pointed out that "population increase is also a form of pollution." He also stated that "there is a real good book in the section on Government, Business, and Labor about pollution."

OC--A student was giving an oral report on the Bill of Rights.

SC--"All of you ought to know all about this. It's for you. You ought to know what is meant by terms like 'eminent domain.'"

OC-A student was reporting on a visit to the Small Claims Court.

SC--"I'11 bet most of you didn't even know there was such a thing. It can be very important if you don't have enough money to hire a lawyer and you need some help."

OC--The student had collected information on the Small Claims Court for each member of the class.

OC--A student was reporting on a comparison shopping activity.

SC--"The guarantee on a television set was a lot better in one store."

SC--"I'11 bet you'11 remember that when you want to buy a television." This comment was made by a second student.

## Dates

Comments

December 19, 1974

January 9, 1975

OC--A student was reporting on a visit to a local bank.

SC-a"I thought you might be interested in this survey by the American Bankers Association which gives a percentage breakdown of various costs for an average family for food, clothing, and housing."

OC--A student was giving a report on a visit to a local stockbroker.

SC--"I learned a lot of things I didn't know about stocks. Do you know what over-the counter stocks are?"

OC--A student was making an oral report on a grocery price comparison.

SC--"I decided to use the same items and stores that the student at the beginning of the semester used. I thought this would give us a real good idea about what has happened to prices in the last four months."

## Chapter 7

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The problem of this study was to develop a student-centered plan of teaching Introduction to Basic Business at the secondary school level. The purposes were to provide an alternative approach to teaching basic business so that the students and the teacher will be intimately involved in the learning process, to propose a realistic plan that will provide a stimulating environment for cognitive achievement and positive affective development, and to enhance the overall image of the basic business course. The student-centered plan focused on the learner. The student determined his own objectives, selected his activities, and pursued them as he desired. The traditional plan was teacher-directed, with the teacher determining the objectives, the activities, and the classroom procedures. The learning environment in the student-centered classroom was informal and relaxed, while the learning environment in the traditional classroom was formal and controlled.

The following hypotheses were investigated:

1. There will not be a significant difference in student achievement in the student-centered Introduction to Basic Business class when compared to student achievement in the traditional Introduction to Basic Business class.
2. There will be a significant difference in positive student attitude toward Comminity, School, Basic Business Course, Basic Business

Classmates, Teaching, Learning, and Me (self) in the student-centered Introduction to Basic Business class when compared to student attitude in the traditional Introduction to Basic Business class.

Forty-three secondary school students in two Introduction to Basic Business classes participated in the study. The two classes were randomly assigned as student-centered and traditional. The same teacher was responsible for both classes.

Student achievement was measured through the use of the Test of Understanding in Personal Economics. The test was administered at the beginning of the semester as a pre-test and at the end of the semester as a post-test. The pre-test score was identified as the covariate. Statistical analysis was performed through the use of a one-way analysis of covariance.

Student attitude was measured by a semantic differential developed by the researcher. The semantic differential was administered at the beginning of the semester as a pre-test and three times during the semester as a post-test. The pre-test score served as the covariate with each of the three succeeding rating scores. The data were analyzed through a two-way analysis of covariance with repeated measures.

Several anthropological research techniques, including interviews, observations, journals, and reaction questionnaires, were used to collect additional information relating to teacher and student reaction. The data obtained through these techniques were not analyzed statistically. The findings showed no significant difference in student achievement in the student-centered Introduction to Basic Business when compared
to student achievement in the traditional Introduction to Basic Business class. Both classes increased in knowledge about basic business, as measured by the specific instrument, from pre-test to post-test. The hypothesis of no significant difference in student achievement was accepted.

A statistical analysis of student attitude through the use of the semantic differential showed no significant differences in student attitude between the student-centered and the traditional Introduction to Basic Business classes. The hypothesis relating to significant differences in student attitude in the student-centered class when compared to the traditional class was rejected.

The data collected through the teacher and student journals and the reaction questionnaires were discussed. These data revealed some of the feelings of the teacher and the students relating to the studentcentered and the traditional classes. Observation notes recorded by the researcher revealed the impressions gained by the observer in both classes. Notes from personal interviews provided implications of the feelings of the teacher, the students, and the principal relating to the two classes.

On the basis of the statistical analyses of student achievement and student attitude, and the comments from the teacher and the students, conclusions were drawn and recommendations were made. The overall conclusion was that the proposed student-centered plan was an effective method of teaching Introduction to Basic Business.

## CONCLUSIONS

On the basis of the statistical analyses, the teacher and student reactions, and the researcher's observations, the following conclusions are drawn:

1. The student-centered Introduction to Basic Business teaching plan, proposed in this study, is as effective in achievement gain as the traditional Introduction to Basic Business teaching plan.
2. The student-centered Introduction to Basic Business teaching plan and the traditional Introduction to Basic Business teaching plan resulted in approximately the same student attitudes toward Community, School, Basic Business Course, Basic Business Classmates, Teaching, Learning, and Me (self).
3. The student-centered Introduction to Basic Business teaching plan, proposed in this study, is more effective than the traditional Introduction to Basic Business teaching plan in developing positive attitudes.
4. The more experience the students gain in a student-centered atmosphere, the more positive their attitudes will become.
5. Although not statistically analyzed, observations by the researcher and comments from the teacher and the students indicated a more informal, relaxed, and stimulating learning environment in the student-centered class than in the traditional class.

RECOMMENDATIONS

On the basis of the conclusions, the following recommendations are made:

1. Basic business teachers should consider the implementation of a student-centered teaching plan in the Introduction to Basic Business course.
2. Basic business teachers should provide a wide variety of materials for student use in the basic business classroom.
3. The Introduction to Basic Business course should focus on current economic and business problems and issues which affect the student in his everyday life.
4. Students should be allowed to determine at least some of their own objectives and activities in the Introduction to Basic Business course.
5. College and university basic business methods courses should provide opportunities for prospective teachers to develop supplementary materials and to observe various methods of teaching basic business courses.
6. Further research should be conducted in the area of instructional methodology in basic business education, with particular emphasis on the student-centered approach and its effectiveness relating to student achievement and attitude.

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## APPENDIXES

## APPENDIX A. General Course Goals*

1. To develop knowledges of business which every person must have if he is to be a wise buyer, user, and producer of business goods and services
2. To establish concepts of business that will contribute to the solution of personal business problems and the understanding of world economic relations
3. To furnish a background for becoming an intelligent participant in commonity and national affairs
4. To develop an understanding and use of business terminology as it applies to business activities
5. To develop further understandings of the role of money and money substitutes in budgeting, savings, and investing
6. To develop knowledges, abilities, attitudes, appreciations, and understandings about
```
our business and economic world
savings
banking services
sharing economic risks
keeping personal records
successful economic citizenship
```

7. To develop understandings of business occupations, their advantages, disadvantages, and limitations
8. To build a foundation for further study in business, economics, and distributive education
[^17]
## APPENDIX B. Teacher's Manual: Traditional Class

Goal
The overall goal of a course in Introduction to Basic Business is to provide experiences in business-related activities that every member of society will encounter, at one time or another, in his everyday 1 ife.

## Topic Areas

The following topic areas will be included in the basic business course:

```
The American Private Enterprise System
Business and the Consumer
Economic Risks and Insurance
Banks and Banking Services
Credit
Savings and Investments
Money Management and Budgeting
Government, Business, and Labor
```

At the beginning of the semester, the teacher will distribute an outline of the topic areas to be covered in the course. The goals for the course and the objectives for each individual topic area will be specified by the teacher and given to the students.

## Instructional Materials

The instructional materials will consist of a textbook and the exercises at the end of each chapter. Each student will be given a textbook at the beginning of the semester.

## Classroom Organization

The classroom will be organized with rows of student desks and a teacher's desk in the front of the room.

## Teacher Activity

The teacher will use the lecture method to introduce each topic. The students will be assigned a chapter for homework, the teacher will discuss it in class the next day, and a list of questions for class discussion will be presented.

## Student Activity

The students will remain in their seats throughout the class period. As the teacher presents a new topic or discusses a familiar one, they may ask questions and take notes. During the class discussion period, the teacher will ask questions of the students. The teacher may call on students to answer questions, but students may also volunteer to answer questions if they desire.

## Learning Environment

The learning environment will consist of the basic business classroom. This room may include reference materials. Planned learning activity, other than assigned homework, will take place only in the classroom.

## General Procedure

The teacher will work out a topic schedule for the entire semester. She will present the topics to the class in outline form. One to two weeks will be devoted to each topic. The same topic will be presented to the entire class. Students will be assigned the same exercises in the textbook, read the same material, and complete the same activities on the same time schedule.

The activities in the classroom will consist of reading from the textbook, exercises from the end of the chapters, and other assigned activities.

The students will present reports to the class. The subject area for the reports will be assigned by the teacher.

## Evaluation

Unit tests. The teacher will administer a uniform test at the end of each unit of instruction or topic area.

Achievement tests. A comprehensive pre-test and post-test will be administered for research purposes.

Attitude measurement. A semantic differential will be administered as a pre-test and three additional times as a post-test. The purpose of the semantic differential will be to obtain data on attitude change while the course is in progress.

Reaction questionnaires. A student and a teacher reaction questionnaire will be presented at selected points during the semester. The format of the questionnaire will be open.

Journals. The students and the teacher will be asked to keep a journal of their feelings, experiences, reactions, likes and dislikes relating to the course. The journal entries may be made on a daily basis, if desired. However, at least one summary statement should be prepared upon completion of each topic area.
INTRODUCTION TO BASIC BUSINESS*TOPIC AREAS
The American Private Enterprise System
Business and the Consumer
Economic Risks and Insurance
Banks and Banking Services
Credit
Savings and Investments
Money Management and Budgeting
Government, Business, and Labor

## CHAPTER ASSIGMENTS*

Topic Areas
The American Private Enterprise System
Business and the ConsumerEconomic Risks and InsuranceBanks and Banking ServicesCreditSavings and InvestmentsMoney Management and Budgeting
Government, Business, and Labor

## Chapters

18, 19
32, 33, 34, 38
$11,13,26,27$
$21,23,25$
29, 31
14,15
9, 42, 44, 45, 46

## General Course Goals

1. To develop knowledges of business which every person must have if he is to be a wise buyer, user, and producer of business goods and services
2. To establish concepts of business that will contribute to the solution of personal business problems and the understanding of world economic relations
3. To furnish a background for becoming an intelligent participant in community and national affairs
4. To develop an understanding and use of business terminology as it applies to business activities
5. To develop further understandings of the role of money and money substitutes in budgeting, savings, and investing
6. To develop knowledges, abilities, attitudes, appreciations, and understandings about
our business and economic world savings
banking services
sharing economic risks
keeping personal records successful economic citizenship
7. To develop understandings of business occupations, their advantages, disadvantages, and limitations
8. To build a foundation for further study in business, economics, and distributive education

## TOPIC AREA OBJECTIVES AND UNDERSTANDINGS*

## The American Private Enterprise System

1. That in a free enterprise system, everyone helps to make economic decisions
2. How profit and competition combine to make a free enterprise system work
3. That all parts of our system are interdependent
4. Why some economic decisions are made by government even in a free enterprise system

## Business and the Consumer

1. How buying skill contributes to wise money management
2. How to get your money's worth when shopping
3. That there are agencies working to protect consumers
4. That sources of consumer information can be a valuable aid in buying
5. That the laws pertaining to everyday business agreements are nothing more than business-1ike practices that serve to prevent misunderstanding

## Economic Risks and Insurance

1. That insurance is the best way to protect against large money losses
2. That insurance is a means by which people share their economic losses
3. That one of the great economic risks people face is that of causing damage or injury to others with their automobiles
4. Why it is important for anyone with dependents to carry life insurance
5. That the cost for all types of insurance is based on the amount of risk involved

[^18]6. That one of the greatest threats to financial security and one of the most difficult to guard against is loss of income
7. That because the cost of health care may vary widely from year to year, most people find it helpful to carry some type of health insurance

## Banks and Banking Services

1. Why money is essential in a business system based on specialization and exchange
2. Why banks are essential in a business system that operates on money and credit
3. That a checking account helps an individual handle money in a business-1ike way
4. That writing and endorsing checks correctly is important because much of the money an individual handles in a lifetime is in the form of checks
5. That in addition to cash and personal checks, there are other ways of making money payments
6. That banks offer many additional services, including savings and credit

## Credit

1. The importance of credit in keeping the business system operating efficiently
2. That there are both advantages and disadvantages to using credit
3. That there are many kinds of consumer credit available today
4. That consumers should shop for credit because the cost varies
5. What it means to use credit wisely
6. That there are a number of reputable sources of consumer loans

## Savings and Investments

1. That systematic saving enables individuals to achieve future goals and to build financial security
2. That savings should be invested; that is, put to work earning more money
3. That the best foundation for building financial security is wise investment of money
4. That there are possibilities for investing in securities

## Money Management and Budgeting

1. That the consumer's major problem in money management is that of making wise choices
2. That wise money management depends on a system of priorities
3. That spending must be planned if money is to be managed wisely
4. That a budget is nothing more than a plan for managing money
5. That money management is the ability to carry out a spending plan

## Government, Business, and Labor

1. How and why labor unions developed
2. That collective bargaining is the basic means by which union workers and their employers agree on conditions and terms of employment
3. That a collective bargaining agreement, or labor contract, is simply a set of work rules
4. That collective bargaining does not eliminate conflict but provides an approach to settling disputes
5. Why some goods and services are provided by government rather than by private enterprise
6. That by paying taxes people purchase social goods and services collectively
7. That as citizens most of us pay taxes to several different levels of government
8. That because taxes are necessary it does not necessarily follow that every tax is fair and just
9. That the problem of taxation is not an easy one to solve
10. That the United States, with its system of free enterprise, has the longest sustained record of economic growth of any nation in the world
11. That economic growth has not solved all our problems
12. That economic growth has created problems
13. How the decisions each of us makes affect the functioning and the future of our private enterprise system

## OBSERVATIONAL DATA

During the Fall semester, I plan to visit the two basic business classes frequently and to work closely with the teacher. I want to observe what is actually taking place in the two classrooms. The student contracts will provide a complete description of the activities that are being pursued in the student-centered class. The teacher's daily plans will provide a description of the activities in the traditional class. The journals kept by the students and the teacher in each class will also provide additional information on activities, feelings, and attitudes.

At the present time, I have not made a final decision on the specific observational information $I$ will need to collect nor the format which I will utilize. I do want to keep careful records of class absences and reasons and student disciplinary incidents in both classes. I also plan to use the accompanying Student Information Sheet in each class.

## STUDENT INFORMMATION SHEET*

NameAgeAddress
Telephone Number
$\qquad$
Number of Brothers
Number of Sisters
Father's Occupation
Mother's Occupation
Grade Level
$\qquad$
Career Goal
$\qquad$Reason for enrolling in Introduction to Basic Business: (Indicate below)

## SEMANTIC DIFFERENTIAL: INSTRUCTIONS*

The purpose of this test is to measure the meanings of certain things to various people by having them judge them against a series of descriptive scales. In taking this test, please make your judgments on the basis of what these things mean to you. On each page, you will find a different concept to be judged and beneath it a set of scales. You are to rate the concept on each of these scales in order.

Here is how you are to use these scales:
If you feel that the concept at the top of the page is very closely related to one end of the scale, you should place your check-mark as follows:


If you feel that the concept is quite closely related to one or the other end of the scale (but not extremely), you should place your check-mark as follows:


The direction toward which you check, of course, depends upon which of the two ends of the scale seems most characteristic of the thing you are judging.

If you consider the concept to be neutral, both sides of the scale equally associated with the concept, or that the scale does not apply to the concept, then you should place your check-mark in the middle space:


At times you may feel as though you've had the same item before on the test. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in the test. Make each item a separate judgment. Work at fairly high speed through this test. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" you have about the items, that $I$ want. On the other hand, please do not be careless, because $I$ want your true impressions.

PLEASE BE SURE TO CHECK EVERY SCALE ON EVERY PAGE.

[^19]
## COMMUNITY



## SCHOOL



## BASIC BUSINESS COURSE



## BASIC BUSINESS CLASSMATES



## teaching



## LEARNING



## ME



## APPENDIX C. Initial Learning Activities

THE AMERICAN PRIVATE ENTERPRISE SYSTEM

## Readings: Textbooks and supplementary materials

## Activities:

1. Make a survey of the businesses that exist in your community. Classify the businesses as scle proprietorships, partnerships, corporations, cooperatives, and non-profit corporations, Identify the characteristics of each type of business organization.
2. Visit the local Chamber of Commerce and determine the types of businesses in your community. Classify them as service or distribution organizations.
3. Read one day's edition of your local newspaper. Clip all articles related to business activity. Determine how each of these affect your community.
4. Secure a copy of the Bill of Rights. Determine how it affects you as a member of the community.
5. Review several business magazines for the current week. Make a list of the economic problems discussed and provide a brief summary of each article.
6. Select one type of business in your community. Determine the changes that have taken place in that business in the past five years as a result of technology. This might include equipment, number of employees, efficiency, etc. Use initial library research on technology and personal interviews with company representative.
7. Determine the trends in our Gross National Product for the past ten years. Prepare a graphic presentation to display in the classroom.
8. Make a comparison of capitalism, socialism, communism, and fascism from the viewpoint of competition, business ownership, and production.
9. From a review of the current business literature and interviews with local businessmen, determine the changes that will probably occur in business in the next 25 years.
10. Review the literature to determine if cooperatives, such as food cooperatives, are being formed today. Survey your community to determine if there are any local cooperatives and, if so, why.
11. From the literature, determine the various sources of capital for American business.

BUSINESS AND THE CONSUMER

Readings: Textbooks and supplementary materials

## Activities:

1. Visit the Better Business Bureau in your community. Make a list of the purposes and the activities of the Bureau. Secure information on how the Better Business Bureau helps protect you as a consumer.
2. Determine the steps to be taken when a consumer believes that he has been unfairly treated by a business organization.
3. Investigate the purpose of the Small Claims Court in your community. Determine how it can help you as a consumer.
4. Select five grocery items in the advertisement of a grocery store in your daily newspaper. Record the price of these five items over a one-month period. Present a graph of the increase or the decrease in price and try to determine the reasons for the fluctuations.
5. Select ten grocery store items. Prepare a description of each including the item name, size, price, etc. Visit five grocery stores and compare the prices of the ten items. Determine the reasons for the differences in prices.
6. Select ten items at a drug store in your community. For the next month record the prices of these ten types of merchandise on a weekly basis, and discuss the increase or decrease in price.
7. Review the current business literature on inflation, Prepare a report on how inflation affects you as a consumer.
8. Select a manufacturing industry in your community. Select one product it produces and trace its distribution from manufacture to purchase by a consumer.
9. Select several brand-name items (these may be grocery items, clothing, household goods, etc.) Then select corresponding items of a lesser-known brand. Record the information from the labels of each item. Analyze the labels and the costs of the items and make a comparison.
10. Collect advertisements from magazines and newspapers and put in booklet form. Analyze the ads for fairness to the consumer.
11. From the business literature, determine how government controls advertising in an attempt to protect the consumer.
12. Select several items of interest to you. Prepare an advertisement that you think would appeal to the consumer.
13. Prepare a television commercial for some new product that you have seen in the literature.

## ECONOMIC RISKS AND INSURANCE

Readings: Textbooks and supplementary materials

## Activities:

1. Visit a local insurance company and determine the types of life insurance plans available. Compare the features of the various types such as whole life, straight life, term, and endowment plans.
2. Collect several insurance policies and analyze each to determine what protection is offered to the consumer and what statements might be misleading.
3. Visit a local insurance agency and determine the differences in cost in obtaining 1 ife insurance at ages $16,25,30$, and 50. Make a comparison and determine the reasons for the differences.
4. Prepare a display of insurance policies which can be obtained from various insurance companies.
5. Make a community survey to determine how many families have health insurance, life insurance, and automobile insurance. Try to determine why they do have insurance coverage and why they do not.
6. Visit the local Social Security office and determine the steps to be taken in obtaining a social security card.
7. If at 16 years of age you should purchase a car, what kinds of insurance would be required?
8. Determine the steps that should be taken if you should have an automobile accident and need to report it to your insurance company. Also determine what you need to know about the other person's insurance.
9. Discuss with a representative of a local insurance company whether you should or should not purchase homeowner's insurance if you rent an apartment or a house.
10. Investigate the concept of "no-fault" insurance for North Carolina. Obtain information from states which have already initiated nofault plans.
11. Compare the cost of no-fault insurance with automobile insurance as it is set up today. Prepare a report of your findings.
12. Visit a local insurance firm and determine the types of insurance a 21-year-old, married man with one child should have.
13. Visit the local Social Security office and investigate the Medicare program. To whom does it apply and how does it operate?

BANKS AND BANKING SERVICES

Readings: Textbooks and supplementary materials

## Activities:

1. Select three banks in your community and determine the procedure in each for opening a checking account. Determine the various costs that are involved at each bank such as checks, service charges, etc. Decide which bank would be most beneficial for you.
2. Review various business magazines and determine the changes in the value of the United States dollar over the past ten years. Prepare a report of the results.
3. Determine the names of the various banks in your community and determine what kinds of banks they represent (commercial, industrial, etc.)
4. Make a survey of several local businessmen and determine their policy for cashing checks for high school students.
5. Interview several local bankers and review the current literature to determine how changes in interest rates affect you as a consumer.
6. Review the business literature in your library and determine the trends in interest rates in the past five years. Prepare a graphic presentation of the changes.
7. Select one bank in your community and determine the various services that the bank offers you as a consumer.
8. Obtain information from the banks in your community which offer bank charge cards. Determine the application process, how the card may be used, and how the interest is computed for each bank. Compare the results.
9. Visit the various banks in your community and determine whether they are state banks, national banks, or Federal Reserve Banks. Compare the differences and similarities of each.
10. Through library research, determine the structure and functions of the Federal Reserve System.
11. Make a collection of various banking forms which you, as a consumer, can use.
12. Prepare a map showing the 12 districts of the Federal Reserve System.
13. From the Iiterature, prepare a report on the role of the United States Treasury Department.

## CREDIT

Readings: Textbooks and supplementary materials

## Activities:

1. Look through your local newspaper for the past week. Clip all the articles dealing with credit and summarize each article.
2. Prepare a list of items commonly bought on credit and a list of items rarely bought on credit. Determine the reasons underlying each list.
3. Visit the Credit Bureau in your community and investigate the types of information collected on consumers. Report the results.
4. Determine the various types of credit cards available in several department stores in your community. Make a comparison of each of the credit plans including how to apply for the cards, interest rates for each, etc.
5. Prepare a report on how the Truth in Lending Law affects you as a consumer.
6. Select an item which you would like to purchase from a department store. Compare the price of the item as a cash purchase and as a charge account purchase.
7. Assume that you would 1 ike to borrow $\$ 1,000$. Make a comparison of interest rates which would be charged on the loan if the money were borrowed from a bank, a credit union, or a consumer finance company.
8. From several credit managers in your community, find out what happens when a customer does not pay for goods purchased on a charge account.
9. Determine the cost of different methods of financing an auto-mobile--through a credit union, a finance company, a bank loan, etc.
10. Obtain several installment credit contracts and analyze each. Sumarize the features of the contracts that the consumer should be aware of before signing. Compare the features of the contracts obtained.

SAVINGS AND INVESTMENTS

Readings: Textbooks and supplementary materials

## Activities:

1. Make a list of the various types of savings institutions in your community.
2. Make a survey in your community to determine the average annual cost of owning a home.
3. Collect items pertaining to savings and investments from your local newspaper. Summarize each article.
4. From the 1iterature, determine whether it is more advantageous to own or rent a home.
5. Determine the various bond issues that have been proposed in your community in the past ten years, the purposes of the issues, and the outcome of each. Prepare a report of your findings.
6. Select ten stocks from the local newspaper and keep a record each day of the fluctuations in price. Keep daily records of the stocks for a one-month period. Prepare graphic presentations and explain the events that you believe caused the fluctuations.
7. Assume that you have $\$ 1,000$ which you would like to put into savings. Investigate the advantages of placing the money in a savings account in a bank, in a savings and loan company, and in insurance.
8. Prepare a savings plan for yourself at the present time and one for five years from now.
9. Visit the local stock exchange and observe the activities of the various stocks. Prepare a reaction to your experience.
10. Read all the articles in one day's edition of your newspaper which you believe will have an effect on the stock market. Summarize the articles and your ideas.
11. Read the financial section of your daily newspaper and determine what the experts are saying about bonds. Compare the prices, interest rates, and risks involved of several of the bonds being issued.
12. From the literature, make a comparison of municipal bonds and corporate bonds and summarize your findings.
13. Select several items of agricultural products and review the commodities section of the newspaper for current prices. Compare these to prices in local stores. Report your findings.

MONEY MANAGEMENT AND BUDGETING

Readings: Textbooks and supplementary materials

## Activities:

1. Review the advertisements in your local newspaper for one week. Determine the "buy of the week," and justify your selection.
2. Select several commonly-used goods and prepare a Buyer's Guide including cost, contents, etc.
3. Select three large items that you would like to buy for your home. Make a comparative shopping survey to determine the best buy on each of the items. Report your findings.
4. Collect the labels from several products and analyze the information given such as approval by some testing laboratory or professional organization.
5. Select several advertisements and determine the appeal that is being made to the consumer in each.
6. Make a list of items whose quality can be determined by close examination and a list of items whose quality cannot be determined by examination.
7. Prepare a budget for yourself based on your weekly income and expenditures.
8. Survey several families in your community and determine how many prepare budgets and plan their spending.
9. Select several products which your family might purchase. Determine the ratings for these products in Consumer Reports or Consumer Research Bulletin. Include how the testing was done and the ratings given to various brands.

GOVERNMENT, BUSINESS, AND LABOR

Readings: Textbooks and supplementary materials

1. From the literature, determine how government regulates public utilities.
2. Determine the types of state and local taxes that the citizens of your community must pay.
3. Determine how governments regulate employment conditions and how these regulations affect you.
4. Investigate the departments of the local government in your community and determine the purposes of each, where the money to operate each is obtained, etc. Prepare a report of your findings.
5. From the literature, determine how taxes can be used to combat inflation.
6. Collect articles from your local newspaper on government regulation of business.
7. From the literature, find out when and why federal income taxes started being withheld from the pay check.
8. From the literature, determine how taxes affect the cost of living.
9. Assume that you earn $\$ 1,000$ a year from a part-time job. Prepare your own federal and state income tax forms for the year.
10. From the literature, determine why labor unions were first formed. Report your findings in written form.
11. Visit several service stations in your community and keep records of the gasoline prices for a one-month period. Prepare a summary of your findings.
12. Collect articles from your local newspaper relating to United States exports and imports and prepare a summary explaining how this affects you as a consumer.
13. Determine the environmental controls that your local government has enacted in the past five years.
14. Determine the social responsibility of business relating to ecology, consumer protection, etc.

## APPENDIX D. Teacher's Manual: Student-Centered Class

## Goal


#### Abstract

The overall goal of a course in Introduction to Basic Business is to provide experiences in business-related activities that every member of society will encounter, at one time or another, in his everyday life.


## Topic Areas

The following topic areas will be included in the basic business course:

> The American Private Enterprise System
> Business and the Consumer
> Economic Risks and Insurance
> Banks and Banking Services
> Credit
> Savings and Investments
> Money Management and Budgeting
> Government, Business, and Labor

These topic areas will be used as a general guide by the teacher in developing initial learning activities for the course (see Initial Learning Activities).

## Instructional Materials

The instructional materials will include textbooks, programmed materials, periodicals, reference books, paperback books, newspapers, and materials in each topic area collected by the teacher and the learners (see Supplementary Materials).

## Classroom Organization

The classroom will be organized in activity centers relating to the topic areas. The activity centers will be located throughout the classroom and outside the classroom in the community. There will be student seats in the classroom.

## Teacher Activity

The teacher will play a supporting role in the classroom. She may discuss a problem with one student, she may act as a part of a discussion group with a group of students, she may present her own actual experiences in a certain area, she may answer questions, help a student with a project, ask questions, etc. The teacher will become a member of the "learner" group.

## Student Activity

The students will not be assigned to seats. There will be seats available in the classroom and they can be moved into any arrangement desired. The students will be free to move around the classroom as they desire, go to the library, go out into the community (see Student Pass), and work in groups or work individually. The student may select any activity he wishes, any time he wishes, and develop his interest in an area as fully as he wishes.

## Learning Environment

The learning environment will consist of the classroom, the entire school, the home, and the community.

## General Procedure

Initial learning activities have been developed in each of the following areas (see Initial Learning Activities):


These initial activities will be placed in the classroom prior to the first day of school. A number of alternative activities are provided in each area and many of the areas are inter-related.

The initial learning activities will serve as a stimulus or a "starting point" in each topic area. They are not to be considered as an outline for each area to be completed by each student. The student may select one or two or three of these activities as a beginning point, or he may propose an activity of his own. From these initial experiences, the student will develop additional activities that are of interest to him and that will help him to achieve his individual objectives.

First week of class. The teacher will play an important role in the explanation of the student-centered approach. It is imperative that the students understand the purpose of this approach and the procedure of inquiry to be followed.

The first week of class will consist of student and teacher exploration of the various topic areas and the alternative initial learning activities. Also during this first week, the student should begin to think about the selection of his first area of inquiry.

Since there are eight topic areas, the student may use a two-week period as a general guide for planning his activities in each area. It will not be necessary for the student to work in any one area for two consecutive weeks. He may plan his time as he desires, but he should keep in mind the total time available in a semester.

Proposed sequential procedure. The following procedure is recommended:

1. The student will first select an area of individual interest and acquire an overview through reading, discussion, etc.
2. The student will next define an inquiry that is of interest to him in his selected area.
3. The student will then, with the help of the teacher, prepare a contract of his proposed activity (see Student Contract).
4. The student will indicate the method in which he proposes to report his findings.

## Evaluation

Individual tests. The teacher and the student will review the individual student contracts in each area. They will discuss the important aspects of the particular activities pursued. The teacher may then prepare a test based on the contracts of the individual student and administer this test at the end of the inquiry period. This may be a written or an oral test.

As an alternative evaluation plan, the teacher may take a random sampling of the contracts of an individual student for several areas and prepare a test on this basis. This would reduce the number of individual tests for each student.

Achievement tests. A comprehensive pre-test and post-test will be administered for research purposes.

Attitude measurement. A semantic differential will be administered as a pre-test and three additional times as a post-test. The purpose of the semantic differential will be to obtain data on attitude change while the course is in progress.

Reaction questionnaires. A student and a teacher reaction questionnaire will be presented at selected points during the semester. The format of the questionnaire will be open.

Journals. The students and the teacher will be asked to keep a journal of their feelings, experiences, reactions, likes and dislikes relating to the course. The journal entries may be made on a daily basis, if desired. However, at least one summary statement should be prepared upon completion of each topic area.

## Sources for Materials

In addition to the textbooks and other reference materials available in the school, there are a number of sources for obtaining materials. The businesses and agencies in the local community offer many printed materials and serve as an excellent source of learning centers themselves. There are also many sources of free and inexpensive materials available in the area of basic business (see List of Resources).
INTRODUCTION TO BASIC BUSINESS*TOPIC AREAS
The American Private Enterprise System
Business and the Consumer
Economic Risks and Insurance
Banks and Banking Services
Credit
Savings and Investments
Money Management and Budgeting
Government, Business, and Labor

## INTRODUCTION TO BASIC BUSINESS*

## General Course Goals

1. To develop knowledges of business which every person must have if he is to be a wise buyer, user, and producer of business goods and services
2. To establish concepts of business that will contribute to the solution of personal business problems and the understanding of world economic relations
3. To furnish a background for becoming an intelligent participant in community and national affairs
4. To develop an understanding and use of business terminology as it applies to business activities
5. To develop further understandings of the role of money and money substitutes in budgeting, savings, and investing
6. To develop knowledges, abilities, attitudes, appreciations, and understandings about
```
our business and economic world
savings
banking services
sharing economic risks
keeping personal records
successful economic citizenship
```

7. To develop understandings of business occupations, their advantages, disadvantages, and limitations
8. To build a foundation for further study in business, economics, and distributive education

## STUDENT PASS

Name____ has permission to visit
during the following time period___ (date).

> Teacher Signature

During the Fall semester, I plan to visit the two basic business classes frequently and to work closely with the teacher. I want to observe what is actually taking place in the two classrooms. The student contracts will provide a complete description of the activities that are being pursued in the student-centered class. The teacher's daily plans will provide a description of the activities in the traditional class. The journals kept by the students and the teacher in each class will also provide additional information on activities, feelings, and attitudes.

At the present time, $I$ have not made a final decision on the specific observational information $I$ will need to collect nor the format which I will utilize. I do want to keep careful records of class absences and reasons and disciplinary incidents in both classes. I also plan to use the accompanying Student Information Sheet in each class.

## STUDENT INFORMATION SHEET*

Name Age

$\qquad$
Address
Telephone Number
$\qquad$
Number of Brothers
$\qquad$
$\qquad$
Father's Occupation
$\qquad$
Mother's Occupation
Grade Level $\qquad$
Career Goal $\qquad$
Reason for enrolling in Introduction to Basic Business: (Indicate below)

## SEMANTIC DIFFERENTIAL: INSTRUCTIONS*

The purpose of this test is to measure the meanings of certain things to various people by having them judge them against a series of descriptive scales. In taking this test, please make your judgments on the basis of what these things mean to you. On each page, you will find a different concept to be judged and beneath it a set of scales. You are to rate the concept on each of these scales in order.

Here is how you are to use these scales:
If you feel that the concept at the top of the page is very closely related to one end of the scale, you should place your check-mark as follows:


If you feel that the concept is quite closely related to one or the other end of the scale (but not extremely), you should place your check-mark as follows:
$\qquad$
The direction toward which you check, of course, depends upon which of the two ends of the scale seems most characteristic of the thing you are judging.

If you consider the concept to be neutral, both sides of the scale equally associated with the concept, or that the scale does not apply to the concept, then you should place your check-mark in the middle space:


At times you may feel as though you've had the same item before on the test. This will not be the case, so do not look back and forth through the items. Do not try to remember how you checked similar items earlier in the test. Make each item a separate judgment. Work at fairly high speed through this test. Do not worry or puzzle over individual items. It is your first impressions, the immediate "feelings" you have about the items, that $I$ want. On the other hand, please do not be careless, because $I$ want your true impressions.

PLEASE BE SURE TO CEECK EVERY SCALE ON EVERY PAGE.
*These were the instructions recommended by Osgood, Suci, and Tannenbaum, The Measurement of Meaning, to accompany the semantic differential.

## COMMUNITY

1. good

SCHOOL


## BASIC BUSINESS COURSE



## BASIC BUSINESS CLASSMATES



## teaching



## LEARNING



## ME



## Name

Date
Topic

Proposed Activity

Purpose of Activity

Resources to be Used

Proposed Method of Reporting

## Approximate Date of Completion

## Student Signature

## EVALUATION SHEET

## Name

Date

Topic $\qquad$
Activity $\qquad$

Notes $\qquad$

Written

Oral

## LIST OF RESOURCES*

The following organizations provide free or inexpensive materials which may be used as supplementary references in Introduction to Basic Business:

| American Bankers Association | Federal Reserve System |
| :---: | :---: |
| American Management Society | Chamber of Commerce |
| Money Management Institute | United States Steel |
| Better Business Bureau | Government Printing Office |
| U. S. Department of Labor | Special Teaching Aids |
| U. S. Post Office Department | Denoyer-Geppert Co. |
| Changing Times Reprint Service | Committee for Economic Development |
| U. S. Department of Health, Education, and Welfare | National Education Association |
| Bellman Publishing Company | Chase Manhattan Bank |
| Association of Stock Exchange Firms | Joint Council on Economic Education |
| National Consumer Finance Association | Modern Talking Picture Service, Inc. |
| Educational Service Bureau of The Wall Street Journal | Institute of Life Insurance |
| Educational Television Program Notes | National Association of Manufacturers |

*Complete addresses for these organizations and others may be obtained from the teacher's manual accompanying the textbook.

## SUPPLEMENTARY REFERENCE MATERIALS*

The American Private Enterprise System
Automation, A Prime Source of More and Better Jobs, National Associa-tion of Manufacturers
Productivity--A Measure of Economic Progress, National Association of Manufacturers
Industrial Research and Development, National Association of Manu- facturers
Productivity and Production in Industry, National Association ofManufacturers
Our Native Land, National Association of Manufacturers
Capital and Economic Growth, National Association of Manufacturers
Antitrust Laws, National Association of Manufacturers
Capitalists: Investors in the Nation's Business, New York StockExchange
The Investment Wor1d, New York Stock Exchange
The Profit System, Good Reading Rack Service
The Role of Marketing, National Association of Manufacturers
Stories About Business, J. Weston Walch, Publisher
Unemployment--Causes and Cures, National Association of Manufacturers
Finance Facts, National Consumer Finance Association
Equal Pay, U. S. Department of Labor
Business and the ConsumerChanging Times, The Kiplinger Service for Families
Car Buying Made Easier, Ford Motor Company
*These supplementary materials will be placed in the classroom.

## Marketing A New Product, A Creative Studies Simulation, The Macmillan Company <br> Supermarket Strategy, A Creative Studies Simulation, The Macmillan Company

## Facts You Should Know About Your Better Business Bureau, Educational

 Division, Better Business Bureau
## Effective Communication in Industry, National Association of Manufacturers

How to Use the Magistrate's Court to Resolve Small Claims, Office of the Attorney General
Planning the Advertising Campaign, A Creative Studies Simulation, The
Macmillan Company
A Consumer's Guide to Postal Services and Products, The Consumer
Advocate, U. S. Postal Service
Federal Trade Commission, Buyer's Guide, No. 7, Federal TradeCommission
Three Days to Cancel Door-to-Door Sales, Three-Day Cooling Off Period,Federal Trade Commission
FDA Consumer Memo, Food and Drug Administration, U. S. Department of Health, Education, and Welfare
Vitamins, Minerals, and FDA, Guidelines, Food and Drug Administration, U. S. Department of Health, Education, and Welfare
Keys to Quality--Food Buying Guides from USDA, U. S. Department ofAgriculture
A Primer on the Economics of Consumption, Random House
Economic Risks and Insurance
Career Opportunities in the Insurance Profession, National Associa-tion of Mutual Insurance Agents
Blueprint for Tomorrow, Institute of Life Insurance and HealthInsurance Institute
What Is the Real Purpose of Life Insurance? Jefferson Standard
Your Social Security, Government Printing Office
Basic Insurance Books, Insurance Information Institute
A Handy Reference for Quickly Determining Income Values of Life Insurance, Jefferson Standard
What to Do in Case of an Auto Accident, Grain Dealers Mutual
Insurance Facts, Insurance Information Institute
Handbook of Life Insurance, Institute of Life Insurance
Your Medicare Handbook, U. S. Department of Health, Education, and Welfare
The Mathematics of Life Insurance, Institute of Life Insurance
Policies for Protection, Institute of Life Insurance
Social Security Benefits--How to Estimate the Amount, U. S. Department of Health, Education, and Welfare
Questions and Answers on Your Social Security Benefits, Jefferson Standard
Why Young Drivers Pay Higher Insurance Rates, American Mutual Insurance Alliance
Family Guide to Property and Liability Insurance, Institute of Insurance Information
Careers in Property and Liability Insurance, Insurance Information Institute
The Extent of Voluntary Health Insurance Coverage in the United States, Health Insurance Council
Chances Are, Insurance Information Institute
If You Become Disabled, U. S. Government Printing Office
Fallacies and Facts, Nationwide Insurance
Decade of Decision, Institute of Life Insurance
It's Up to You, Institute of Life Insurance
The Mutualizer, The Carolina Association of Mutual Insurance Agents
An Analysis of Death and Retirement, Jefferson Standard
General Information on Insurance and Bonds, Hartford Insurance Group
Source Book of Health Insurance, Health Insurance Institute
Instruments of the Money Market, Federal Reserve Bank
How Much and What Kind of Life Insurance Should I Own? Connecticut Mutual Life
Sets, Probability, and Statistics, Institute of Life Insurance
Sharing the Risk, Institute of Life Insurance
Employment Security Law of North Carolina, The Miche Company
Questions and Answers About Tax Sheltered Annuities, Jefferson Standard
The New ABC's of Health Insurance, Department of Health, Education, and Welfare
Summary of the Provisions of the Old-Age, Survivors, and Disability Insurance System, Temple University
Journal of Insurance, The Institute of Life Insurance
Ranking of 818 Life Companies, Institute of Life Insurance
Plain Talk About Auto Insurance, American Mutual Insurance Alliance
A Paper Outlining the Failings of a No-Fault Scheme, National Association of Independent Insurance Agents
Telling It Like It Is, National Association of Independent Insurers
Understanding Your Life Insurance, Institute of Life Insurance
Teaching Topics, Institute of Life Insurance

Banks and Banking Services
Keeping Our Money Healthy, Federal Reserve Bank of New York
Some Helpful Hints About Paying for College, North Carolina National Bank

Genuine or Counterfeit? Federal Reserve Bank

Counterfeiting and Forgery, U. S. Government Printing Office
Come with Me to the F.O.M.C., Federal Reserve Bank

Money and You, The American Bankers Association
The Story of Checks, Federal Reserve Bank of New York
Using Banking Services, The American Bankers Association
Your Money Supply, Federal Reserve Bank
Fundamental Facts About U. S. Money, Federal Reserve Bank
Safe Deposit Boxes, Bankamerica Service Corporation
Member Bank Lending to Small Businesses, Federal Reserve Bulletin
The Monetary System of the U. S., Federal Reserve Bulletin
Inside the Federal Reserve Bank of Richmond, Federal Reserve Bank
Banking from the Stone Age to the Atomic Age, The American Bankers Association

Investments of the Money Market, Federal Reserve Bank
Your Money and the Federal Reserve System, Federal Reserve Bank

## Credit

Interest Rates in Leading Countries, Federal Reserve Bulletin
Directly Placed Finance Company Paper, Reprinted, Federal Reserve Bulletin

Influence of Credit and Monetary Measures on Economic Stability, Federal Reserve Bulletin

Small Business Financing, Federal Reserve System
What Truth in Lending Means to You, Federal Reserve System
Using Installment Credit, Commercial Credit Company
Basic Principles in Family Money and Credit Management, National Consumer Finance Association

Mafor Tendencies in Business Finance, Federal Reserve Bulletin
The Federal Wage Garnishment Law, U. S. Government Printing Office

## Savings and Investments

How to Read a Financial Report, Merrill Lynch, Pierce, Fenner, \& Smith, Inc.

Investors' Notebook, New York Stock Exchange
The Newspaper and the Investor, The New York Stock Exchange
Investing for American Families, The New York Stock Exchange
Understanding the New York Stock Exchange, The New York Stock Exchange

Now, About the Specialist, New York Stock Exchange
Wise Home Buying, U. S. Department of Housing and Urban Development

Understanding the Modern Securities Market, Research Publications Corp .

How to Read an Annual Report, Standard Oil of New Jersey
Money Management, Your Health and Recreation Dollar, Money Management Institute

Your Budget, Money Management Institute
Your Automobile Dollar, Money Management Institute

## Money Management and Budgeting

Money Management--Your Equipment Dollar, Household Finance Corporation
Children's Spending, Household Finance Corporation
Personal Money Management, The American Bankers Association
Making the Most of Your Money, Institute of Life Insurance
Money Management for Young Moderns, Household Finance Corporation
Measuring Price Changes, Federal Reserve Bank of Richmond

## Your Shopping Dollar, Household Finance Corporation <br> Your Shelter Dollar, Household Finance Corporation <br> Your Clothing Dollar, Household Finance Corporation

Government, Business, and Labor
Monthly Economic News Letter, First National City Bank of New York
Retirement Income Credit, Department of the Treasury
Tax Information on Moving Expenses, Internal Revenue Service
Tax Information on Deductions for Homeowners, Internal Revenue Service
Tax Information on Pensions and Annuities, Internal Revenue Service
Other Miscellaneous Deductions, Internal Revenue Service
Deduction for Medical and Dental Expenses, Internal Revenue Service
Income Tax Deduction for Interest Expense, Internal Revenue Service
Careers in Tax Work, Internal Revenue Service
Instructions for Preparing Short Form 1040A, Internal Revenue Service
Guilford County Regulations Governing Air Pollution Control, Guilford County

Wages and Prices, National Association of Manufacturers
The General Learning System, General Learning Corporation
Inflation and/or Unemployment, Federal Reserve Bank
High Point Directory, Chamber of Commerce
Income Tax Guide, J. K. Lasser Tax Institute
Department of Transportation News, National Highway Traffic Safety Administration

Washington Report, Chamber of Commerce
Keeping Records: What to Discard, Public Documents Distribution Center

# Pollution and the Environment, Bureau of Business Research <br> History of Buildings of High Point, Chamber of Commerce <br> Income Tax Forms, Federal and State, Internal Revenue Service 

## Basic References

Planned Protection Service, Jefferson Standard
Economic Concepts: A Programmed Approach, McGraw-Hill Book Company
The Effective Entrepreneur, Canada
The American Consumer: Issues and Decisions, McGraw-Hill Book Company

Consumer Decision Making, South-Western Publishing Co.
Mathematics for the Consumer, South-Western Publishing Co.
General Business, South-Western Publishing Co.
Perspectives in Consumer Behavior, Holt, Rinehart and Winston, Inc.
The Environment of Business, Holt, Rinehart and Winston, Inc.
The American Consumer, McGraw-Hill Book Company
The Real Computer: Its Influence, Uses, and Effects, Addison Wesley Publishing Company

The Geography of Economic Activity, McGraw-Hill Book Company
Outside Readings in Economics, Thomas Y. Crowell Company
The Medicine Show, New York Consumers Union
The Worldly Philosophers, Simon and Schuster
The Waste Makers, Simon and Schuster
The Hidden Persuaders, Simon and Schuster
The Status Seekers, Simon and Schuster
The Affluent Society, American Library of World Literature
Non-Bank Financial Institutions, Federal Reserve Bank of Richmond

## Economic Cases for Discussion, The Macmillan Company

## U. S. News and World Report

Time

## Consumer Research Bulletin

## Consumer Reports

## Almanac

Daily Newspaper delivered to the class

## APPENDIX E. Student Pass

## STUDENT PASS



Teacher Signature
(If off campus)
Parent Signature

## APPENDIX F. Group Presentations

1. Select three people to be in your group.
2. Select one topic area per group (from the eight areas).
3. Create an activity (not on the initial activity sheets) for oral group presentation to the class.
4. Characteristics of the presentation:
a. A current problem or issue
b. An activity that can be presented orally
c. An activity that will be of interest to class members
d. An activity that can be presented with visual and/or audio aids
5. Each presentation will be judged by the class. Class members will look for creativity, originality, quality, and suitability to topic area. Class members will also look for methods of presentation and the use of various techniques for attracting and holding interest.
6. Examples:

A skit
A painting
A song (recorded on tape)
A comic strip (like Snoopy series)
A slide presentation
A set of transparencies for advertising products
A newspaper article (written by the group)
A set of posters

EACH GROUP WILL COMPETE FOR FIRST PLACE. DO NOT TELL OTHER GROUPS WHAT YOU PLAN TO DO

Planning and preparation time: 3 class periods

## APPENDIX G. Group Presentation Evaluation Sheet

Instructions: Rate each group on each of the following characteristics:
Rating Scale
Excellent ..... 3
Average ..... 2
Fair ..... 1

1. Current problem or issue
2. Suitable for oral presentation
3. Interest to class members
4. Use of audio and/or visual aids
5. Creativity (use of imagination)
6. Originality (created by group members)
7. Suitability (to topic area selected)
8. Quality (overall quality of presentation)
9. Participation: All group members involved
10. Adequate time
Total RatingAverage Rating (Total $=$total number of points;Average $=$ total dividedby 10 )

APPENDIX H. Student Test Scores

Table 29
Pre- and Post-Test Achievement Scores and Norms
for the Traditional Class

| Student No. | Pre-Test <br> Score | Pre-Test <br> Norm | Post-Test <br> Score | Post-Test <br> Norm |
| :---: | :---: | :---: | :---: | :---: |
| A-1 | 31 | 87 |  |  |
| B-1 | 17 | 35 | 18 | 92 |
| C-1 | 16 | 31 | 18 | 41 |
| D-1 | 11 | 10 | 15 | 41 |
| E-1 | 16 | 31 | 21 | 26 |
| F-1 | 21 | 58 | 24 | 58 |
| G-1 | 25 | 74 | 23 | 70 |
| H-1 | 18 | 41 | 22 | 67 |
| I-1 | 14 | 21 | 21 | 62 |
| J-1 | 12 | 13 | 16 | 58 |
| K-1 | 16 | 31 | 14 | 31 |
| L-1 | 24 | 70 | 25 | 21 |
| M-1 | 21 | 58 | 25 | 74 |
| N-1 | 23 | 67 | 31 | 74 |
| O-1 | 15 | 26 | 18 | 87 |
| P-1 | 27 | 79 | 30 | 41 |
| Q-1 | 19 | 45 | 27 | 85 |
| R-1 | 17 | 35 | 28 | 79 |
| S-1 | 19 | 45 | 25 | 81 |
| T-1 | 16 | 31 | 22 | 74 |

Table 30
Pre- and Post-Test Achievement Scores and Norms for the Student-Centered Class

| Student No. | Pre-Test Score | Pre-Test Norm | Post-Test Score | Post-Test Norm |
| :---: | :---: | :---: | :---: | :---: |
| A-2 | 30 | 85 | 38 | 97 |
| B-2 | 20 | 52 | 33 | 92 |
| C-2 | 22 | 62 | 22 | 62 |
| D-2 | 24 | 70 | 29 | 83 |
| E-2 | 18 | 41 | 21 | 58 |
| F-2 | 16 | 31 | 12 | 13 |
| G-2 | 17 | 35 | 19 | 45 |
| H-2 | 17 | 35 | 22 | 62 |
| I-2 | 19 | 45 | 23 | 67 |
| J-2 | 17 | 35 | 23 | 67 |
| K-2 | 12 | 13 | 18 | 41 |
| L-2 | 15 | 26 | 15 | 26 |
| M-2 | 16 | 31 | 26 | 76 |
| N-2 | 16 | 31 | 10 | 8 |
| 0-2 | 16 | 31 | 13 | 17 |
| P-2 | 24 | 70 | 30 | 85 |
| Q-2 | 17 | 35 | 19 | 45 |
| R-2 | 14 | 21 | 22 | 62 |
| S-2 | 14 | 21 | 15 | 26 |
| T-2 | 25 | 74 | 31 | 87 |
| U-2 | 14 | 21 | 15 | 26 |
| V-2 | 23 | 67 | 24 | 70 |
| W-2 | 22 | 62 | 31 | 87 |

## APPENDIX I. Student-Initiated Activities

## THE AMERICAN PRIVATE ENTERPRISE SYSTEM

## Activities:

1. From the literature, determine how profits and inflation help and hurt a nation.
2. Prepare a report on how the profit system works.
3. Prepare a report on unemployment and determine the possible causes.
4. Prepare a report on the role of government in business.
5. Prepare a report on how a free enterprise system solves basic economic problems.
6. Prepare a report on the American Private Enterprise System.
7. Make a graphic presentation of customer-oriented marketing in a modern corporation.
8. Prepare a report on the functions of marketing.
9. Visit several local automobile dealerships to explore changes in equipment in recent years.
10. Prepare a report on economic growth and the growth of American industry.
11. Prepare a report on automation in industry.
12. Prepare a report on the importance of "profit" in a free enterprise system.
13. Prepare a written report on unemployment using the newspaper as a major resource.
14. Determine the basic reasons for business failures.
15. Determine the changes that have taken place in a specific furniturerelated business in the past five years as a result of technology.
16. Prepare a report on the growth of American industry for the past ten years.

## Activities:

1. Select and compare prices on items from a North Carolina newspaper with the same items in The New York Times.
2. Prepare a report on generic drugs.
3. Determine the advantages and disadvantages of business ownership.
4. Select several advertisements from the newspaper and magazines and determine the specific appeal being used in each.
5. Select five advertisements that illustrate various types of consumer appeal and arrange these in booklet form to demonstrate the power of advertising.
6. Prepare a report on the importance of food labeling on cans. Determine the kinds of information shown and the information that should be given on the labels.
7. Prepare a report on the weekly cost of food for a family of our community--four members, low-cost plan and liberal plan.
8. Visit the local post office and determine the various consumer information bulletins available.
9. Determine January 6, 1975, prices on items selected and compared by another student on September 5, 1974. Figure percent of price increase or decrease.
10. Prepare a demonstration of a television commercial to determine if it is fair or misleading to the consumer.
11. Select ten items in a drug store and record the increase or decrease in price for a two-week period.
12. Prepare a report on the purpose and advantages of comparison shopping.
13. Visit several department stores and determine the various types of "sales" in which the stores engage.
14. Prepare a report on stock market frauds and determine the agencies that protect the consumer against frauds.

## ECONOMIC RISKS AND INSURANCE

## Activities:

1. Study the new proposals for automobile insurance and examine the current auto insurance plans.
2. Determine some of the ways parents of teenagers can keep the rates of their automobile insurance down.
3. Prepare a report on automobile liability insurance.
4. Prepare a report on health insurance indicating the various types and their purposes.
5. Prepare a report on the history of Social Security.
6. Determine how automobile insurance rates are computed.
7. Determine the reasons for purchasing automobile insurance.
8. From the literature, determine the time at which automobile accidents most frequently occur.
9. Determine the fallacies and the facts about insurance.
10. Prepare a chart showing the amount of invested funds in 1973.
11. Prepare a report showing why auto insurance is higher for young drivers.
12. Prepare a report explaining why young drivers pay high insurance rates in some states.
13. Prepare a report on the purpose and function of health insurance.
14. Prepare a report on basic health insurance for the family.
15. Prepare a poster to show the difference in liability insurance rates among selected states.
16. Prepare a report on insurance careers.
17. Determine the various careers available in the insurance industry and prepare a written description of each.
18. Prepare a report to determine if renters should purchase property insurance.
19. Identify the various types of "income" insurance, such as annuities and social security, and prepare a written report describing each type.
20. Survey several neighbors to determine the types of insurance they have purchased and why. ;
21. Obtain and explain an insurance policy.
22. Prepare a report on the purpose and function of Social Security.
23. Prepare a report on automobile collision insurance.
24. Prepare a poster showing the various types of accidents and the number of deaths and injuries in each type.
25. Determine the various types of home and property insurance and explain the function of each.
26. Prepare a report on the advantages of purchasing life insurance.
banks and banking services

## Activities:

1. Determine the process that a loan company uses in issuing a loan.
2. Make a drawing of a U. S. dollar bill and tell about each part of it from serial number to portrait on the bill.
3. Prepare a report on the "pyramid of credit."
4. Prepare a report on the banking systems of various countries.
5. Prepare a report on the history of banking.
6. Prepare a bulletin board on the source of bank loans.
7. Prepare a report on making and using money.
8. Prepare a report on the various functions of banking.
9. Prepare a report on the different services offered by a local bank.
10. Determine the services offered by and the history of one local bank.
11. Determine how the rate of inflation has increased in the past five years.
12. Prepare a report on interest rates in the community and determine how they affect the consumer.
13. Determine how banks regulate our money supply.
14. Prepare a bulletin board illustrating the various sources of loans.
15. Prepare a report describing our money system in the United States.
16. Prepare a report on the history of the Federal Reserve System.
17. Prepare a report on the physical characteristics of paper currency.
18. Prepare a report on the purpose and use of a safe deposit box.
19. Prepare a report on the characteristics of genuine and counterfeit currency.
20. Prepare a report on how the money system operates.
21. Visit several local banks and determine the bank security that is provided by each.
22. From local banks, make a collection of the various banking forms used by the consumer for various purposes.

## CREDIT

## Activities:

1. Determine the part that interest rates play in inflation.
2. Determine the function of a savings and loan association.
3. Determine the do's and don'ts for the wise use of credit.
4. Prepare a report showing the different types of credit.
5. Prepare a report on the function of credit.
6. Prepare a report to show the penalties imposed when loans are not paid.
7. Prepare a report relating to the Federal Wage Garnishment Law.
8. Prepare a report on the use of installment credit.
9. Explain the process for obtaining a loan from a bank.
10. Determine the various methods of obtaining credit or buying on credit, such as charge accounts and installment credit.
11. Determine the effect of the Federal Wage Garnishment Law on the consumer.
12. From the literature, determine the advantages and disadvantages of credit buying for the consumer and for the economy.
13. Prepare a poster showing common items consumers buy on credit.
14. Prepare a cartoon illustrating an unwise use of credit.
15. Prepare a chart on current interest rates in your community.
16. Make a graphic presentation of installment and non-installment credit.

SAVINGS AND INVESTMENTS

## Activities:

1. Prepare a report on the advantages and disadvantages of owning a home.
2. Prepare a report on the sources of information for the prospective investor.
3. Prepare a report on the savings and loan association.
4. Prepare a report on the meaning of "leverage" relative to savings and investments.
5. Prepare a report to show why stock prices fluctuate.
6. Determine the various investment possibilities available to the public.
7. Prepare a report on the New York Stock Exchange.
8. Prepare a report on the method of reading a balance sheet.
9. Prepare a report on the risk factor in various investment forms.
10. Prepare a report on the various types of stocks.
11. Prepare a report on a comparison of investment in real estate and insurance-advantages and disadvantages.
12. Survey various banks and loan companies located in the community.
13. Describe the process of investing money through the purchase of stocks and bonds and determine which is the safer investment.
14. Prepare a chart showing the value of the dollar in 1960 , 1965, 1970, and 1975.
15. Prepare a written report describing the use of bonds and the market value, the sale of, the safety of, and the interest on bonds.
16. Prepare a report on the advantages and disadvantages of renting a home.
17. Prepare a report on the history of the stock market.
18. Prepare a report on the factors to be considered when selecting a real estate broker.
19. Visit a local real estate agency and determine the costs, advantages, and disadvantages of buying a condominium in comparison with renting a home.
20. Determine the factors to be considered in buying a home.

MONEY MANAGEMENT AND BUDGETING

## Activities:

1. Determine the various factors to be considered in order to make wise use of your food dollar.
2. Prepare a report to show how to set up a budget.
3. Determine the "best buy," a Plymouth and a Chevrolet, based solely on advertisements. Which would be the "best buy"?
4. Prepare a personal budget for one week.
5. Prepare a report on money management and the importance of a budget.
6. Determine when it would be a wise decision to buy a mobile, or trailer, home, a camper, or a second home.
7. Prepare a report on the best use of the shopping dollar.
8. Prepare a report on handling the recreation dollar.
9. Prepare a report on the effect of children's spending.
10. Visit several automobile dealerships in your community and determine the "best buy" on a small automobile. Report the criteria for selection in your findings.
11. From the literature, determine the factors that should be considered when buying home furnishings.
12. Prepare a report on the wise use of the grocery dollar.
13. Prepare a report on the importance of personal money management.

GOVERNMENT, BUSINESS, AND LABOR

## Activities:

1. Examine the rules and regulations of our school and determine the influence of the Student Government.
2. Prepare a report on pollution caused by business and how it affects the community.
3. Determine the function of credit in the economy.
4. Prepare a report on trade with foreign countries.
5. Prepare a report on governmental control of toys.
6. Prepare a report on Federal auto emission controls.
7. Prepare a report on opportunities for disabled workers.
8. Prepare a television serial on equal employment opportunities.
9. From the literature, prepare a report on the Federal food standards.
10. Prepare a report on equal employment opportunities and present in written form.
11. Prepare a report on the various kinds of taxes.
12. Prepare a report on governmental control of the environment.
13. Review the current literature to determine what the Government (Federal) is doing to fight pollution.
14. Secure a copy of the Bill of Rights and analyze the various parts.
15. Clip all the articles from a daily newspaper related to a current problem and summarize each.
16. Determine the various occupational advances made by minority groups as a result of government action.
17. Determine the various taxes paid by the consumer and the uses made of the tax funds.
18. Determine the role of Government in Equal Opportunity Employment.
19. Determine the cost of the new city water system to the citizens of the local community.
20. Determine the various types of pollution and how they affect your community.
21. Determine the current gasoline savings being made by the reduced speed limit.
22. Clip all articles from newspapers for one week relating to relation between taxes and inflation and summarize each.
23. Visit the local City Hall and determine the smoke pollution regulations. Then, visit a local company and investigate its compliance with the regulations and determine the changes that were necessary to meet the regulations.
24. Determine the regulations set by the government relating to safety conditions in a factory and explain how the regulations protect the worker.

## APPENDIX J. Researcher's Personal Reactions

As a classroom observer in the traditional and the student* centered Introduction to Basic Business classes, the researcher formed an overall impression of each of the two teaching plans.

The atmosphere in the traditional class was formal and teachercontrolled. The students did not appear to be interested in the subject matter nor in participating in out-of-class activities and projects. They seemed to be only passive participants in classroom activities.

The atmosphere in the student-centered class was informal and relaxed. There was a feeling of "openness" on the part of the students and the teacher. The students appeared to be interested in their projects and eager to share their ideas with the members of the class. There was an air of excitement in the classroom.

The findings of the study revealed that the gain in achievement in the student-centered class was approximately the same as the achievement gain in the traditional class. Since the measurement device was composed of specific information and required details, it might be assumed that the students in the traditional class would achieve higher scores. They had been exposed to specific, memory-type information for a whole semester. They were also required to take unit tests which were similar to the final achievement test. The students in the student-centered class were not given any tests during the semester. As is indicated by the findings, it could be concluded that it is not necessary to drill students on memory-type exercises in order for them to learn pertinent information about various topics.

A comparison of student attitude in the two classes revealed that as the semester progressed, the students in the student-centered class increased in positive attitude. They appeared to enjoy the activities in which they were engaged and did not disiike the course. This was not true in the traditional class. As the semester progressed, the traditional class students decreased in positive attitude on several concepts and often described the class as boring.

The overall impression gained by the researcher was that the alternative approach, the student-centered teaching plan, does have a positive impact on student attitude toward the course and that the students achieve as much gain in knowledge about basic business as with the more conventional plans. The student-centered plan provided an atmosphere of freedom and trust. The students were given an opportunity to learn about the aspects of business that will affect their everyday life and an opportunity to enjoy their involvement in the learning process.


[^0]:    ${ }^{1}$ Herbert R. Koh1, The Open Classroom (New York: Random House, Inc., 1972), p. 12.
    ${ }^{2}$ John Holt, How Children Fail (New York: Dell Publishing Co., Inc., 1972), p. 15.
    ${ }^{3}$ Holt, p. 15.

[^1]:    ${ }^{4}$ Alfred North Whitehead, The Aims of Education and Other Essays (New York: The Macmillan Company, 1967), p. 5.
    ${ }^{5}$ Ralph W. Tyler, Basic Principles of Curriculum and Instruction (Chicago: The University of Chicago Press, 1971), p. 1.

[^2]:    . . . an ongoing flow of experiencing involving three interacting facets: exploring, integrating, and transcending the

[^3]:    $1_{J a m e s ~ B . ~ M a c d o n a l d, ~ B e r n i c e ~ J . ~ W o l f s o n, ~ a n d ~ E s t h e r ~ S . ~ Z a r e t, ~}^{\text {I }}$ Reschooling Society: A Conceptual Model (Washington, D. C.: Association for Supervision and Curriculum Development, 1973), p. 10.

[^4]:    $7^{7}$ Seiler, p. 107.

[^5]:    18 Joan Rothwell Mortimer, "A Student-Centered Language Arts Curriculum and Its Effect on Pupils' Attitudes and Achievement" (unpublished Doctoral dissertation, The University of New Mexico, 1971), p. 5.

[^6]:    ${ }^{25}$ Rubenstein, p. 23.

[^7]:    26Rubenstein, p. 29.

[^8]:    30Mary Elizabeth Spidle, "A Study of the Techniques Used in Teaching General Business in the Secondary High School for an Economic Understanding," National Business Education Quarterly, XXXIII (Fall, 1964), 58.
    ${ }^{31}$ Spidle, p. 58.
    ${ }^{32}$ Lester I. Sluder, "An Analysis and Synthesis of Research Findings Pertaining to General Business," National Business Education Quarterly, XXXVI (Fall, 1967), 71.

[^9]:    ${ }^{3}$ North Carolina Curriculum Guide and Courses of Study in Business Education, Pp. 38-42.

[^10]:    4Joint Council on Economic Education, Test of Understanding in Personal Economics (New York: Joint Council on Economic Education, 1971).
    ${ }^{5}$ Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, The Measurement of Meaning (Urbana, Ill.: University of Illinois Press, 1957), pp. 77-81.

[^11]:    ${ }^{6}$ Fred N. Kerlinger, Foundations of Behavioral Research (2d ed.; New York: Holt, Rinehart and Winston, Inc., 1973), p. 570.

    7 Kerlinger, p. 570.
    $8_{0 \text { sgood, Suci, and Tannenbaum, pp. 53-55. }}$

[^12]:    $1_{\text {Rand Corporation, A Million Random Digits With } 100,000 \text { Normal }}$ Deviates (Glencoe, Ill.: The Free Press, Publishers, 1955), p. 217.

[^13]:    ${ }^{2}$ North Carolina Curriculum Guide and Courses of Study in Business Education PP. 38-42.

[^14]:    ${ }^{3}$ Ray G. Price, Vernon A. Musselman, and J. Curtis Hall, General Business for Everyday Living (4th ed.; New York: Gregg Division/McGrawHill Book Company, 1972)

[^15]:    ${ }^{4}$ Joan Rothwell Mortimer, "A Student-Centered Language Arts Curriculum and Its Effect on Pupils' Attitudes and Achievement" (unpublished Doctoral dissertation, The University of New Mexico, 1971).

[^16]:    $1_{\text {Joint }}$ Council on Economic Education, Test of Understanding in Personal Economics (New York: Joint Council on Economic Education, 1971).

[^17]:    *The general course goals were those recommended in the North Carolina Curriculum Guide and Courses of Study in Business Education, p. 38.

[^18]:    *The course objectives were taken from the teacher's manual accompanying the book, General Business for Everyday Living. To be distributed to students.

[^19]:    *These were the instructions recommended by Osgood, Suci, and Tannenbaum, The Measurement of Meaning, to accompany the semantic differential.

