This paper describes the development of a questionnaire for evaluating the activities of the Employee Development Program (EDP) at Paradise Valley Community College Center (PVCCC) in Phoenix (Arizona). Four major goals of the evaluation of the activities of the EDP, and a means for ensuring the content validity of the questionnaire are described. Statistical procedures for analyzing empirical data to be generated from the future administration of the questionnaire, and a procedure for scanning empirical data into an ASCII computer data file and for downloading the file into an IBM-PC are identified. Specific procedures are identified for reporting and analyzing written comments that are generated in response to the questionnaire, and recommendations are made regarding procedures used for administering the questionnaire. The questionnaire, which evaluates the effectiveness of employee's participation in the activities of the EDP in terms of helping them to achieve the goals of the EDP, was developed based on the goals of the evaluation, a review of the related literature, and advice from three research experts. The questionnaire can be revised yearly, and it identifies the percentage of employee participation in each of the employee development activities listed in the questionnaire, new activities that would potentially result in the personal and professional development of the participants, and suggestions for improving the questionnaire's design and administration. A general purpose data sheet is included. (RLC)
DEVELOPMENT OF A QUESTIONNAIRE DESIGNED TO EVALUATE
THE EMPLOYEE DEVELOPMENT ACTIVITIES AT
PARADISE VALLEY COMMUNITY
COLLEGE CENTER
Politics, Law, and Economics of Higher Education

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ABSTRACT

A study of the development, analysis, and administration of questionnaires was conducted. As a result of this study, an extensive questionnaire was developed to evaluate the activities of the Employee Development Program at Paradise Valley Community College Center. Specifically, the goals of the future evaluation of the activities of the Employee Development Program were determined, and a means for ensuring the content validity of the questionnaire was developed and implemented. In addition, statistical procedures were chosen for the analysis of the empirical data that will be generated from the future implementation of the questionnaire. Moreover, a procedure for scanning empirical data into an ASCII computer data file and for downloading the file into an IBM-PC was identified. The ABstat version 6.02 computer software statistical program (ABstat, 1989) was suggested for use in analyzing the data generated from the future administration of the questionnaire. Furthermore, specific procedures were identified for the reporting and analysis of any written comments that may be generated from the future administration of the questionnaire. In addition, specific recommendations were made regarding the procedures to be used for the future administration of the questionnaire. Lastly, the questionnaire was field tested.

Based on the results of this study, the recommendation was made that the Provost of Paradise Valley Community College Center charge the Employee Development Committee members with the task of administering and analyzing the questionnaire developed for this study. Based on the analysis of the data generated from the future administration of the questionnaire, the Employee Development Committee members will have data upon which to base recommendations for the improvement of the Employee Development Program.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>BACKGROUND AND SIGNIFICANCE</td>
<td>3</td>
</tr>
<tr>
<td>PROCEDURES</td>
<td>6</td>
</tr>
<tr>
<td>Limitations and Assumptions</td>
<td>9</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>9</td>
</tr>
<tr>
<td>RESULTS</td>
<td>10</td>
</tr>
<tr>
<td>DISCUSSION AND RECOMMENDATIONS</td>
<td>32</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>34</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>36</td>
</tr>
<tr>
<td>A. EMPLOYEE DEVELOPMENT FOUR GENERAL GOALS</td>
<td>36</td>
</tr>
<tr>
<td>B. EVALUATION OF THE EFFECTIVENESS OF EMPLOYEE DEVELOPMENT ACTIVITIES AT PARADISE VALLEY COMMUNITY COLLEGE CENTER</td>
<td>39</td>
</tr>
<tr>
<td>C. GENERAL PURPOSE DATA SHEET I FORM NUMBER 19543</td>
<td>45</td>
</tr>
<tr>
<td>D. PARADISE VALLEY COMMUNITY COLLEGE CENTER MEMORANDUM</td>
<td>47</td>
</tr>
</tbody>
</table>
INTRODUCTION

Effective employee development programs are characteristic of well-run institutions of higher education (Roueche and Baker, 1983). Yet, it is important that employees' participation in employee development activities do, in fact, result in the personal and professional development of the participants. If not, employees will resent administrators who espouse lofty employee development goals but do not put them into practice (Jaffe and Scott, 1988). Paradise Valley Community College Center's Employee Development Program is designed to "foster personal and professional development among all college employees" (Employee Development: A Statement of Philosophy brochure (n.d.:1). The four goals of the Employee Development Program at Paradise Valley Community College Center as stated in the Employee Development: A Statement of Philosophy brochure (n.d.:3) are as follows:

1. To give employees an opportunity to understand the mission of the institution and their role.
2. To help employees improve their job performance in terms of effectiveness, efficiency, and personal satisfaction.
3. To provide employees opportunities for professional and personal development.
4. To recognize and reward employees for their personal and professional contributions to the institution on a regular and continuing basis.

Personnel of Paradise Valley Community College Center have developed activities designed to provide the participants with a means for achieving one or more of the four goals of the Employee Development Program. However, an assessment has never been conducted to determine whether employees' participation in these activities is effective in helping them to meet these goals, nor is there a system in place to do so. Miller (1986:425) contends that institutional assessment is important to maintaining institutional quality and suggests: "A
determination of how well the goals of the specific area assessed are being met should be made. The appropriate instruments and techniques must be selected and administered to the constituencies involved. Given these realities, the following problem was studied: Administrators at Paradise Valley Community College Center lack a means for evaluating the effectiveness of the Employee Development Program.

The Employee Development Committee at Paradise Valley Community College Center is made up of representatives of three of the five employee groups represented on campus (RFF--Residential Faculty (four representatives), MATP--Management/Administrative/Technical Personnel (five representatives), and PSA--Professional Staff (two representatives). The Crafts employee group and the M&O--Maintenance and Operations employee group are not represented on the committee. At a meeting of the Employee Development Committee, chaired by the Provost of the college, the members discussed the need to evaluate employees' participation in employee development activities in terms of whether their participation in the activities leads to the achievement of the goals of the Employee Development Program. Members of the Employee Development Committee reported that they had been approached by various employees who questioned whether their participation in certain employee development activities aided them in becoming more effective personally and professionally. In order to gather empirical data more systematically regarding this problem, the committee members decided to develop an extensive questionnaire that would measure whether employees found that their participation in employee development activities effectively enhanced their personal and professional development. In addition, the committee members decided to design the questionnaire in such a way that it could be modified each academic year for the purposes of evaluating the effectiveness of participation in employee development activities implemented during each academic year. This would provide the committee members with a means for conducting a yearly evaluation of participation in employee development activities. Moreover, the committee members
determined that they needed to identify the appropriate statistical procedures for analyzing the empirical data and, if necessary, a system for reporting any potential written responses. Lastly, the committee members committed themselves to developing a procedure for the future implementation of the questionnaire.

In summary, as a result of this study, the Provost of Paradise Valley Community College Center was provided with a questionnaire that can be revised yearly to evaluate the effectiveness of employees' participation in the college's employee development activities in terms of meeting one or more of the four goals of the Employee Development Program and to generate suggestions for new activities. The Provost was also given specific procedures for the future administration and analysis of the questionnaire.

BACKGROUND AND SIGNIFICANCE

Several references in the literature regarding the importance of developing, implementing, and evaluating Employee Development Programs were reviewed. When participation in employee development activities aids personnel to become more effective personally and professionally, this participation contributes to the effective functioning of institutions of higher education (Roueche and Baker, 1983). Peters (1987) suggests that successful institutions have activities in place that aid participants in the achievement of employee development objectives. Peters (1987:386) writes that "we must invest in human capital as much as in hardware." Similarly, Craven (1986:452) quoting from a speech presented by C. R. Pace titled "Thoughts on Evaluation in Higher Education" writes:

A college or university is a habitat, a society, a community, an environment, an ecosystem. It should be judged by the quality of life that it fosters, the opportunities for experience and exploration it provides, the concern for growth, for enrichment, and for culture that it exemplifies. The question is not just "what does your machine produce?" but also "how does your garden grow?"
Hekimian (1984:2) suggests that "one of the requirements of a profession is that its members continue to grow in order that their clients receive the best skills and knowledge available to them."

The goals of the Employee Development Program at Paradise Valley Community College Center have been documented to be the goals of well-run institutions (Peters and Waterman, 1982). However, the Employee Development Program has never been systematically evaluated. Miller (1986:425) writes:

Institutional evaluation should use objective data where available and purposeful. . . . The absence of objective data should stimulate those responsible for institutional evaluation to devise their own survey instruments, guidelines, and checklists or to use systematically treated judgment as bases for decision making.

Those who are expected to participate in institutional programs should be involved in their development and in their subsequent evaluation (Clagett, 1980; Naisbitt, 1982; Roueche and Baker, 1983). Schuster (1989:70), writing about faculty development programs, states that "the faculty itself must be involved in any effort to create, expand, or evaluate faculty development activities." Similarly, Locke (1985:3) contends that "the active participation of teachers in all aspects of inservice programs is seen as vital for the success of those programs."

Peters (1987:342) suggests:

We must involve all personnel at all levels in all functions in virtually everything: for example, quality improvement programs and 100 percent self-inspection; productivity improvement programs; measuring and monitoring results; budget development, monitoring, and adjustment; layout of work areas; assessment of new technology; recruiting and hiring; making customer calls and participating in customer visit programs.

Bradford and Cohen (1984:184-185) write:

The rule of thumb is to have greater involvement when subordinates have crucial information or abilities and a quality solution is needed. . . . The question is whether you want excellent performance. Groups (and individuals) can't achieve that standard if they don't address issues of significance and work through them together.

Lastly, Hekimian (1984:38) suggests that "the meaningful involvement of staff in the evaluation process promotes a sense of trust, awareness, and commitment."
In order to develop tools that will in fact generate an effective evaluation of participation in employee development activities, care must be taken in their development, administration, and analysis (Glass and Stanley, 1970; Hopkins and Glass, 1978; Isaac and Michael, 1981; Babble, 1975; Zemke and Rossett, 1985). Fink and Kosecoff (1985:13) suggest:

Survey and methods fall on a continuum. Some surveys can have far-reaching, generalizable effects, and their methods must be scientific. Others are conducted to meet very specific needs; their methods may not always achieve scientific rigor, but they must still be valid.

In addition, Kerlinger (1973:457) writes:

The commonest definition of validity is epitomized by the question: Are we measuring what we think we are measuring? The emphasis in this question is on what is being measured. Although the commonest definition of validity was given above, it must be immediately emphasized that there is no one validity. A test or scale is valid for the scientific or practical purpose of its user.

One way to address the validity of the questionnaire that was developed for this study is to investigate its content validity. Kerlinger (1973:458) states:

Content validity is the representativeness or sampling adequacy of the content—the substance, the matter, the topics—of a measuring instrument. Content validation is guided by the question: Is the substance or content of this measure representative of the content or the universe of content of the property being measured?

The successful achievement of the goals of the Employee Development Program is important in achieving the mission of Paradise Valley Community College Center. Since the outcomes of this study are related to involving personnel in determining the outcomes of decisions that affect them and involve the development of human capital, this study is related to the principles presented in the Politics, Law, and Economics Seminar. As noted in the study guide for the Politics, Law, and Economics seminar, Martorana, Kelly, and Nespoli (1989:5) support the involvement of personnel in Employee Development Programs when they write:

It is simply that, if the personnel engaged in the enterprise are to be meaningfully involved, influential, in determining the direction and broad operating procedures of the enterprise, they ought to be well-informed about the philosophy, functions, and structures of the enterprise.
In addition, Martorana, Kelly, and Nespoli (1989:34) note:

Ideally, policies to govern and guide the affairs of postsecondary education ought to emerge from the regularly established structures and processes of governance. In that ideal condition one would expect that the full range of interests within the organization would have a voice and a way to express it as the policy isdeveloped and made official.

As a result of this study, personnel of Paradise Valley Community College Center were given the opportunity to be better informed regarding the Employee Development Program at the college and were given a voice in developing the questionnaire that will eventually be used to evaluate the activities of the Employee Development Program.

In summary, the purpose of this study was to produce a questionnaire designed to evaluate the effectiveness of employees' participation in the activities of the Employee Development Program in terms of helping them to achieve the goals of the Employee Development Program at Paradise Valley Community College Center. The development of this questionnaire is an important first step in operationalizing Strategic Planning Goal Number Three of Paradise Valley Community College Center: "Strengthen Paradise Valley Community College Center's Employee Development Program" (Maricopa Community Colleges Strategic Plan Summary FY 1990-91, n.d.).

PROCEDURES

In order to design the questionnaire and to make recommendations regarding its future implementation and analysis, the following procedures were followed:

1. A member of the Employee Development Committee completed a review of related literature on the effective development, analysis, and administration of questionnaires.

2. Based on the review of the related literature regarding the effective development of questionnaires, the Employee Development Committee members developed the goals of the
evaluation of the activities of the Employee Development Program. Six research hypotheses were developed in this regard.

3. In order to ensure the content validity of the questionnaire to be developed, the Employee Development Committee members formed a subcommittee. The goal of the subcommittee was to identify the activities that were designed to provide participants with the opportunity to achieve one or more of the four employee development goals. The subcommittee then met with the full committee to solicit feedback regarding their work. Lastly, the subcommittee held informational meetings with all full-time and part-time Maricopa County Community College District Governing Board approved employees at the college. The purpose of these informational meetings was to provide employees with the opportunity to review the list of activities that were identified by the Employee Development Committee as activities that were designed to meet one or more of the four employee development goals. At these informational meetings, employees were encouraged to ask questions regarding activities with which they may have been unfamiliar. If an employee was unable to attend one of these meetings, a member of the Employee Development Subcommittee met with him or her to share the list of activities.

4. Based on the review of the related literature regarding the effective development of questionnaires and based on the goals of the evaluation of the activities of the Employee Development Program, the subcommittee developed the questionnaire. The subcommittee then met with the full committee to solicit feedback regarding the questionnaire.

5. Three research experts evaluated the degree of appropriateness of the questionnaire in measuring whether employees perceived their participation in the activities as effective in terms of the stated goal. In addition, the research experts evaluated the directions for filling out the questionnaire.

6. Three research experts recommended the statistical procedures needed and a computer software statistical program that could be used to analyze the empirical data generated from the
future implementation of the questionnaire. Based on the review of the related literature and the recommendations of the three research experts, the subcommittee chose the statistical procedures and a computer software statistical program that will be used to analyze the empirical data generated from the future implementation of the questionnaire.

7. Three research experts recommended a form that employees could eventually use to record their responses to the questionnaire items. In addition, the three research experts recommended, explained, and demonstrated a procedure for scanning into a computer data file the empirical data generated from the future implementation of the questionnaire. Lastly, the three research experts recommended, explained, and demonstrated a procedure for downloading the computer data file into a computer software statistical program. Based on the review of the related literature and the recommendations of the three research experts, the Employee Development Committee members chose the data form, the procedure for scanning and downloading the empirical data, and the computer software statistical program that will be used to analyze the empirical data generated from the future implementation of the questionnaire.

8. Three research experts suggested a procedure for reporting any written responses that may be generated from the future implementation of the questionnaire. Based on the review of the related literature and the recommendations of the three research experts, the subcommittee developed a procedure for reporting and analyzing any written responses that may be generated from the future implementation of the questionnaire.

9. Based on the review of the related literature, the Employee Development subcommittee members developed a procedure for the future administration of the questionnaire. The population to be surveyed was identified, and specific procedures for dissemination and collection of the completed questionnaires were developed. Three research experts reviewed the proposed process for administration of the questionnaire.
10. The questionnaire was field tested. A representative from four employee groups filled out the questionnaire and provided feedback regarding their understanding of the purpose of the questionnaire and the directions for filling out the questionnaire.

Limitations and Assumptions

The assumption was made that all full-time and part-time Maricopa County Community College District Governing Board approved employees at the college were provided with an opportunity to review the list of activities that were identified to meet one or more of the four employee development goals. Generalizations from the data generated from the future implementation of the questionnaire could be limited if some employees who eventually participate in the survey are unfamiliar with some of the activities of the Employee Development Program.

Definition of Terms

1. Employee development program: A program designed by an institution to foster the personal and professional success of its employees.

2. Program evaluation: "The process of specifying, defining, collecting, analyzing, and interpreting information about designated aspects of a given program and using that information to arrive at value judgments among decision alternatives regarding the installation, continuation, modification, or termination of a program" (Craven, 1986:434).

3. Questionnaire: A printed question and answer format such as surveys, polls, and checklists to which individuals respond by choosing from lists of prepared answers or writing in original responses (Zemke and Rossett, 1985).

4. Survey: "A method of collecting information directly from people about their feelings, motivations, plans, beliefs, and personal, educational, and financial background. It usually
takes the form of a questionnaire that someone fills out alone or with assistance, or it can be conducted as an interview in person or on the telephone (Fink and Kosecoff, 1985:13).

RESULTS

A literature review on the effective development, analysis, and administration of questionnaires was completed. Fink and Kosecoff (1985:15) write that questionnaires "can be used to make policy or plan and evaluate programs and conduct research when the information you need should come directly from people." In addition, Isaac and Michael (1981:130) write that the advantages of using questionnaires in educational research are that they are "inexpensive; wide-ranging; can be well designed, simple and clear; are self-administering; and can be made anonymous." Moreover, Fink and Kosecoff (1985:20) conclude that "valid and reliable information is obtained by using the most rigorous methods available. This means having knowledge of survey design and sampling procedures and questionnaire construction."

Lastly, Lenning (1986:281) writes:

It should be apparent by now that there are primary criteria for indicator, measure, and data collection method selection other than just reliability and validity, including appropriateness to the analytical procedures and tests planned, ease of data collection, ease of scoring and tabulation, collection or analysis cost, and whether program planners and administrators will be able to understand readily the implications of such data.

According to Fink and Kosecoff (1985), when developing questionnaires, the following questions need to be considered: What are the information needs or hypotheses? What types of items will be included? How will the items be structured? Do the items have content validity? What level of measurement will be used? What type of measurement scale will be used? How will the questionnaire be formatted? Who will be surveyed?

When discussing guidelines for institutional evaluation, Miller (1986:425) writes: "A clear definition of the goals of the assessment, as distinct from the goals of the specific area being assessed, should be made. The main focus of assessment should be on evaluation of
educational quality as measured by goal-oriented outcomes." When discussing the development of the content of a questionnaire, Fink and Kosecoff (1985:23) state: "Deciding on a survey's content means setting the survey's boundaries so that you can write the correct questions."

Lenning (1986:282) suggests that when deciding on the goals of the assessment of a program, an initial wholistic and 'broad-band' focus followed by a more in-depth and detailed 'narrow-band' focus [can be effective]. In the broad-band phase, secondary data that are already available and questionnaire or interview data that have a gross level of focus on broad areas in terms of needs (plus broad, open-ended questions regarding needs) are examined to identify important need areas that call for a more detailed focus. Then detailed and in-depth needs data that can support need understanding and setting need priorities (including open-ended data at that level of detail) are collected for those need areas that seemed most important in the broad-band phase.

Isaac and Michael (1981:133) note that for a questionnaire to be effective, "it requires a careful, clear statement of the problem underlying the questionnaire." Moreover, Kerlinger (1973:485) writes that "the purpose of each question is to elicit information that can be used to test the hypotheses of the research." Barton (1987:15-16) writes:

The hypothesis is a statement of the outcome which you anticipate in this investigation. This is a statement about the relationships between variables. It is always a simple statement of what you expect to be shown, and should not involve such words as "should" or "ought", and it will not be stated in terms of morals or ethics. As a final point, in any project there can be more than one hypothesis. In any particular project you should use only the number of hypotheses that you can investigate in the time available and with the resources at hand.

When considering the types of items to be included in a questionnaire, Babble (1975:106) writes:

The term "questionnaire" suggests a collection of questions, but an examination of a typical questionnaire will probably reveal as many statements as questions. This is not without reason. Often, the researcher is interested in determining the extent to which respondents hold a particular attitude or perspective.

In addition, Babble (1975) advises that questionnaires may contain open-ended and or closed-ended questions. Open-ended questions are questions in which "the respondent is asked to provide his own answer to the question. In the other case, closed-ended questions, the respondent is asked to select his answer from among a list provided by the researcher." (Babble
Kerlinger (1973:485) writes:

Some information can best be obtained with the open-ended question—reasons for behavior, intentions, and attitudes. Certain other information, on the other hand, can be more expeditiously obtained with closed questions. If all that is required of a respondent is his preferred choice of two or more alternatives, and these alternatives can be clearly specified, it would be wasteful to use an open-ended question.

Similarly, Isaac and Michael (1981:133) suggest that "objectivity is important. Lengthy subjective, open-ended answers are difficult for the respondent to write and for the investigator to evaluate. If the possible categories of responses can be anticipated, these should be offered as alternatives to an objective question." When considering questionnaire length, Fink and Kosecoff (1965:42) conclude:

The length of a survey form depends upon what you need to know and how many questions are necessary so that the resulting answers will be credible. Self-administered questionnaires ... are generally limited to thirty minutes and contain the fewest items. ... Another consideration is the respondents. How much time do they have available, and will they pay attention to the survey?

When discussing how the closed-ended items of a questionnaire should be structured, Babble (1975:107) writes: "The response categories provided should be exhaustive: they should include all the possible responses that might be expected. ... Second, the answer categories must be mutually exclusive: the respondent should not be compelled to select more than one." In addition, Babble (1975:108) suggests that items should be clear: "Questionnaire items should be precise so that the respondent knows exactly what the researcher wants an answer to." Moreover, Kerlinger (1973:485-487) suggests seven criteria for writing questionnaire items:

1. Is the question related to the research problem and the research objectives? 2. Is the type of question right and appropriate? 3. Is the item clear and unambiguous? 4. Is the question a leading question? 5. Does the question demand knowledge and information that the respondent does not have? 6. Does the question demand personal or delicate material that the respondent may resist? 7. Is the question loaded with social desirability?

Developers of questionnaires must concern themselves with the content validity of the items included in the questionnaire. Fink and Kosecoff (1985:50) propose:
A survey can be validated by proving that its items or questions accurately represent the characteristics or attitudes that they are intended to measure. Content validity is usually established by asking experts whether the items are representative samples of the attitudes and traits you want to survey.

In addition, Kerlinger (1973:459) writes:

Content validation, then, is basically judgmental. The items of a test must be studied, each item being weighed for its presumed representativeness of the universe. This means that each item must be judged for its presumed relevance to the property being measured, which is no easy task. Usually other "competent" judges should judge the content of the items. The universe of content must, if possible, be clearly defined; that is, the judges must be furnished with specific directions for making judgments, as well as with specification of what they are judging.

When developing items for a questionnaire, the type of measurement to be used must be chosen. Kerlinger (1973:427-435) defines measurement as

"the assignment of numerals to objects or events according to rules." A rule is a guide, a method, a command that tells us what to do. A mathematical rule is \( f \), a function; \( f \) is a rule for assigning the objects of one set to the objects of another set. In measurement a rule might say: "Assign the numeral 1 through 5 to individuals according to how nice they are. If an individual is very, very nice, let the number 5 be assigned to him. If an individual is not at all nice, let the number 1 be assigned. Assign to individuals between these limits numbers between the limits." The rules to assign numerals to objects define the kind of scale and the level of measurement.

Similarly, Fink and Kosecoff (1985:33) suggest that "with rating, the respondent places the item being rated at some point along a continuum or in any one of an ordered series of categories; A numerical value is assigned to the point or category." Kerlinger (1973) discusses four levels of measurement: nominal, ordinal, interval, and ratio. Kerlinger (1973:435-438) defines these levels of measurement as follows:

The lowest level of measurement is nominal measurement. The numbers assigned to objects are numerical without having a number meaning; they cannot be ordered or added. If individuals or groups are assigned 1, 2, 3, ..., these numerals are merely names. Ordinal measurement requires that the objects of a set can be rank-ordered on an operationally defined characteristic or property. Ordinal numbers indicate rank order and nothing more. The numbers do not indicate absolute quantities, nor do they indicate that the intervals between the numbers are equal. Interval or equal-interval scales possess the characteristics of nominal and ordinal scales, especially the rank-order characteristic. In addition, numerically equal distances on interval scales represent equal distances in the property being measured. A ratio scale, in addition to possessing the characteristics of nominal, ordinal, and interval scales, has an absolute or natural zero that has empirical...
meaning. If a measurement is zero on a ratio scale, then there is a basis for saying that
some object has none of the property being measured.

In addition to deciding on the appropriate level of measurement, researchers must decide
on the measure scale to be used. Attitude scales have been used to evaluate educational programs
(Kerlinger, 1973). Kerlinger (1973:495-496) defines an attitude as

an organized predisposition to think, feel, perceive, and behave toward a referent or
cognitive object. It is an enduring structure of beliefs that predisposes the individual to
behave selectively toward attitude referents. A referent is a category, class, or set of
phenomena: physical objects, events, behaviors, even constructs. People have attitudes
toward many different things: ethnic groups, institutions, religion, educational issues and
practices, the Supreme Court, civil rights, private property, and so on.

Moreover, Anastasi (1972:479-480) defines an attitude as

a tendency to react favorably or unfavorably toward a designated class of stimuli, such as a
national or racial group, a custom, or an institution. It is evident that, when so defined,
attitudes cannot be directly observed, but must be inferred from overt behavior, both
verbal and nonverbal. In more objective terms, the concept of attitude may be said to
connote response consistency with regard to certain categories of stimuli.

When discussing attitude scales, Isaac and Michael (1981:142) define a scale as

a measuring device allowing the assignment of symbols or numbers to individuals, or their
behaviors, by rule. Such an assignment indicates the individual's possession of a
corresponding amount of whatever the scale is claimed to measure.

Regarding attitude scales, Anastasi (1972:480) observes:

Attitude scales... typically yield a total score indicating the direction or intensity of the
individual's attitude toward a company, group of people, policy, or other stimulus category.
In the construction of an attitude scale, the different questions are designed to measure a
single attitude or unidimensional variable, and some objective procedures are usually
followed in the effort to approach this goal. An employee attitude scale, for example, yields
a single score showing the individual's degree of job satisfaction or over-all attitude toward
the company.

Babble (1975:351) indicates that a Likert scale developed by Rensis Likert should be used
when identical response categories will be used for "several items intended to measure a given
variable [and when] each item [must] be scored in a uniform matter." Isaac and Michael
(1981:142) define Likert-type or summated rating scales as containing
a set of items, all of which are considered approximately equal in attitude or value loading. The subject responds with varying degrees of intensity on a scale ranging between extremes such as agree-disagree, like-dislike or accept-reject. The scores of the position responses for each of the separate scales are summed, or summed and averaged, to yield an individual's attitude score. Summated rating scales seem to be the most useful in behavioral research. The main advantage of a summated scale lies in the greater variance obtained. The disadvantage, as with all scales, is the vulnerability of this variance to biasing response sets (e.g., the over-rater or the under-rater).

Babbie (1975:351) concludes that "the Likert method is based on the assumption that the overall score based on responses to the many items seeming to reflect the variable under consideration provides a reasonably good measure of the variable." Moreover, nominal scales are used when the researcher is interested in data regarding a particular group to which a respondent belongs (Fink and Kosecoff, 1985). Lastly, ordinal scales are used when the investigator is interested in data regarding how respondents rank ordered items (Fink and Kosecoff, 1985).

When considering the format of a questionnaire, Fink and Kosecoff (1985) suggest that decisions need to be made regarding the ordering of questions and the aesthetics of the questionnaire. Similarly, Babbie (1975:111) warns that the format of a questionnaire can be just as important as the nature and wording of the questions asked. An improperly laid out questionnaire can lead respondents to miss questions, can confuse them as to the nature of the data desired, and, in the extreme, can lead to respondents throwing the questionnaire away.

Fink and Kosecoff (1985:43-44) provide the following suggestions for formatting questionnaires:

All surveys should be preceded by an introduction, and the first set of questions should be related to the topic described in it. People sometimes respond best when the first questions ask for objective facts. Once they become used to the survey and more certain of its purposes, they will usually provide the answers to relatively subjective questions. Questions should proceed from the most familiar to the least. Place relatively easy-to-answer questions at the end. When questionnaires are long or difficult, respondents may get tired and answer the last questions carelessly or not answer them at all. Avoid many items that look alike. Twenty items, all of which ask the respondent to agree or disagree with statements, may lead to fatigue or boredom, and the respondent may give up. To minimize loss of interest, group questions and provide transitions that describe the format or topic.
Questions that are relatively sensitive should be placed toward the end. Finally, questions should appear in logical order.

In terms of aesthetical considerations when developing a questionnaire, Fink and Kosecoff (1985:45) note: "A questionnaire's appearance is vitally important. A self-administered questionnaire that is hard to read can confuse or irritate respondents. The result is loss of data." Similarly, Babbie (1975:111) advises that "the questionnaire should be spread out and uncluttered. The researcher should maximize the 'white space' in his instrument." Moreover, when making decisions regarding response format, Fink and Kosecoff (1985) suggest that if the researchers choose to ask about a topic that they know in advance will not be relevant to everyone in the survey, the questionnaire must be designed in such a way that it allows for respondents to skip those items. Babbie (1975:122) urges that "the format should take intended processing methods into account. If the questionnaire is to be read by an optical-sensing machine, then the researcher must check his format against the requirements of the machine." Lastly, Babbie (1975:114) writes: "All the foregoing discussion [regarding format considerations for developing questionnaires] should point out the way in which seemingly theoretical issues of validity and reliability are involved in so mundane a matter as how to put questions on a piece of paper."

When considering who should be surveyed, researchers turn their considerations to sample size. Isaac and Michael (1981:132) write: "Whenever practical, especially if a survey touches on controversial matters or will lead to an important decision or conclusion, it is well to include all possible respondents." Similarly, Miller (1986:425) advises: "All persons who are affected and interested in the programs under review should be continually made aware of and often involved in the assessment process." In addition, Kerlinger (1973:127-128) notes:

Use as large samples as possible. Whenever a mean, a percentage, or other statistic is calculated from a sample, a population value is being estimated. Large samples are not advocated because large numbers are good in and of themselves. They are advocated in order
to give the principle of randomization, or simply randomness, a chance to "work," to speak somewhat anthropomorphically.

In the process of developing questionnaires, researchers must make decisions regarding the analysis of the empirical data that will be generated from the future administration of the questionnaires. Craven (1986:446) writes:

What analytical methodologies are needed? [Researchers must] specify those analytical methodologies needed to convert the data elements into the required evaluation information. The methodologies may vary in complexity, depending upon the specified information outputs. In this regard, there is nothing inherently superior about evaluations that employ sophisticated analytical techniques; the important criterion is whether the analytical methodologies and the resulting information meet the requirements of the evaluation questions and objectives in a valid, reliable, and objective manner. Further, as a basic guideline, it is preferable to keep the analytical requirements within a moderate range of complexity in order to facilitate participant understanding and communication of the evaluation findings.

In addition, Fink and Kosecoff (1985:73) write:

Analyzing data from surveys means tallying and averaging responses, looking at their relationships, and comparing them—sometimes over time. The appropriate analysis method to use is dependent upon the answers to at least five questions: (1) How many people are you surveying? (2) Are you looking for relationships or associations? (3) Will you be comparing groups? (4) Will your survey be conducted once or several times? (5) Are the data recorded as numbers and percentages or scores and averages?

When discussing methods typically used to analyze data generated from questionnaires, Fink and Kosecoff (1985:73) write:

Commonly used survey data analysis techniques include the following: (1) descriptive statistics (mean, mode, median, numbers, percentage, range, standard deviations) (2) correlations (Spearman rank-order, Pearson product-moment) (3) comparisons (Mann-Whitney U, chi-square, t-test, analysis of variance) and (4) trends (repeated measures analysis of variance, McNemar test).

If investigators are interested in testing for significant differences among the means of two or more groups, "the statistical technique known as the analysis of variance (ANOVA) is used to determine whether the differences among two or more means are greater than would be expected by chance alone. ANOVA employs the F-test, which is the ratio of two independent

Analysis of variance . . . answers the question, Is the variability between groups large enough in comparison with the variability within groups to justify the inference that the means of the populations from which the different groups were sampled are not all the same? In other words, if the variability between groups means is large enough, we can conclude they probably come from different populations and that there is a statistically significant difference present in the data.

Moreover, Isaac and Michael (1981:182) conclude:

While the analysis of variance is the first step in the analysis of these more complex designs, it is only a preliminary and exploratory tool. If a significant F-ratio is obtained, the researcher only knows that somewhere in his data something other than chance is probably operating. He next must attempt to isolate the presence, nature, and extent of this non-chance influence.

Kerlinger (1973:236) concurs when he writes:

In analysis of variance, an overall F test, if significant, simply indicates that there are significant differences somewhere in the data. Inspection of the means can tell one, though imprecisely, which differences are important. To test hypotheses, however, more or less controlled and precise statistical tests are needed.

In order to determine where the significant differences are, researchers must use a post hoc test. Kerlinger (1973:235) advocates the use of the Scheffe test:

The Scheffe test, if used with discretion, is a general method that can be applied to all comparisons of means after an analysis of variance. If and only if the F test is significant, one can test all the differences between the means; one can test the combined mean of two or more groups against the mean of one other group; or one can select any combination of means against any other combination.

If investigators, using ranked data, are interested in testing for significant differences among two or more groups, a one-way analysis of variance (Kruskal-Wallis Test) is employed. Kerlinger (1973:290) writes: "There are . . . research situations in which the only form of measurement possible is rank order, or ordinal measurement. The Kruskal and Wallis test is most useful in such situations."

If a questionnaire contains open-ended questions, a method for analyzing the responses must be chosen. "Content analysis is an objective and quantitative method for assigning types of
verbal and other data to categories" (Kerlinger, 1973:417). Kerlinger (1973:528) suggests that the first step in conducting a content analysis is "to define \( U \), the universe of content that is to be analyzed. Categorization, or the partitioning of \( U \), is perhaps the most important part of content analysis, because it is a direct reflection of the theory and the problem of a study. It spells out, in effect, the variables of the hypotheses." In addition, Kerlinger (1973:528) notes that when conducting a content analysis, the units of analysis must be identified:

The word is the smallest unit. (There can ever be smaller units: letters, phonemes, etc.) It is also an easy unit to work with, especially in computer content analysis. The theme is a useful though more difficult unit. A theme is often a sentence, a proposition about something. Themes are combined into sets of themes. It should be emphasized, . . . that if the themes are complex, content analysis using the theme as the unit of analysis is difficult and perhaps unreliable.

Furthermore, Kerlinger (1973:530), when discussing the assignment of numbers to the objects of a content analysis, suggests:

There are three or more ways to assign numbers to the objects of the content analysis \( U \). The first and most common of these corresponds to nominal measurement: count the number of objects in each category after assigning each object to its proper category. A second form of quantification is ranking, or ordinal measurement. If one is working with not too many objects to be ranked—say not more than 30—judges can be asked to rank them according to a specified criterion. A third form of quantification is rating. Children's compositions, for example, can be rated as wholes for degrees of creativity, originality, inner-direction and other-direction, achievement orientation, interests, values, and other variables.

According to Kerlinger (1973:530) certain conditions need to be met before quantification is worthwhile or justified:

(1) to count carefully (or otherwise quantify) when the materials to be analyzed are representative, and (2) to count carefully when the category items appear in the materials in sufficient numbers to justify counting (or otherwise quantifying). The reason for both conditions is obvious: if the materials are not representative or if the category items are relatively infrequent, generalization from statistics calculated from them is unwarranted.

Finally, when discussing the analysis of data resulting from both closed-ended and open-ended questionnaire items, Lenning (1986:283) writes:

The analyses used should be understandable and meaningful to those who will use the information coming out of the analyses. Also, in doing the analyses, care must be taken that different scales are not erroneously equated and that hard and soft data are integrated in a
way that does not mislead. For example, changing soft data to numbers can misrepresent the original picture if one is not careful. Subjective analysis ("eyeballing") and logic are often called for in comparing data. If materials cannot meet the criteria, they can be used only for heuristic and suggestive purposes and not for relating variables to each other.

In addition to choosing the data analysis methods, a decision needs to be made regarding the use of a computer to analyze empirical data generated from the questionnaires (Isaac and Michael, 1981; Craven, 1986). Questions to ask and answer regarding the use of a computer are: How will the information be inputted into the computer? Does the institution have the hardware and software necessary to scan the data into a data file? If so, will a special answer sheet be needed? If a special answer sheet is needed, will the respondents be required to use a special marking instrument? What computer hardware and software are available to analyze the data? Does the institution have expert personnel in data analysis using computer hardware and software? If not, will there be sufficient budget money to hire a data analysis expert?

After a questionnaire has been developed and decisions have been made regarding the analysis of the data, the questionnaire should be pilot tested. Fink and Kosecoff (1985:42) advise:

When pilot testing, anticipate the actual circumstances in which the survey will be conducted and make plans to handle them. Choose respondents similar to the ones who will eventually complete the survey, and enlist as many people as you can. For reliability, focus on the clarity of the questions and the general format of the survey. Pilot testing also bolsters validity because it can help you see that all topics are included and that sufficient variety in the responses is available--if people truly differ, your survey will pick up those differences.

Zemke and Rossett (1985:6) offer similar advice: "Always pilot the questionnaire. Ask a sample group or at least two individuals to comment on clarity and format. This feedback indicates which questions and instructions should be reworded or edited, reducing the possibility of misinterpretation." Lastly, Isaac and Michael (1981:136) offer the following additional suggestion: "Analyse [sic] the results to assess the effectiveness of the trial questionnaire to yield the information desired."
Moreover, researchers need to develop a plan for an on-going assessment of institutional programs. Miller (1989:425) advises that "the process of collecting data should be established in such a way that it can continue beyond the first self-assessment as a routine function of the master planning and decision-making process." Furthermore, Miller (1989:425) suggests that "essential to effective self-assessment is the periodic evaluation of the system itself. The system should be cost-effective in both dollars and human time spent to provide vital information for decision making." Lastly, Miller (1986:426) advises:

A plan for evaluating the evaluation should be included. Most evaluation reports make little or no provision for evaluation of their effectiveness. Such evaluations of evaluations are useful as testimony to the importance of evaluation in future improvement, for providing systematic checkpoints on progress, and for providing a procedure for orderly modifications based upon subsequent findings.

Lastly, when the questionnaire has been developed, researchers must concern themselves with the issues related to the administration of the questionnaire in order to ensure an acceptable rate of return. Fink and Kosecoff (1985:45) write: "Self-administered questionnaires require much preparation and monitoring to get a reasonable response rate. These questionnaires are given directly to people for completion and very little assistance is available in case a respondent does not understand a question." Fink and Kosecoff (1985:46) offer the following suggestions for using self-administered questionnaires:

1. Send respondents a preletter telling them the purpose of your survey. This should warn people that the survey is coming, explain why the respondents should answer the questions, and tell them about who is being surveyed. 2. Prepare a short, formal letter to accompany the questionnaire form. If you have already sent a preletter, this one should be very concise. It should again describe the survey and questionnaire aims and participants. 3. Offer to send respondents a summary of the findings so they can see just how the data are used. (If you promise this, budget for it) 4. If you ask questions that may be construed as personal--such as sex, age, or income--explain why they are necessary. 5. Keep questionnaire procedures simple. Provide stamped self-addressed envelopes. Keep page folding to a minimum so respondents do not feel they are involved in complicated physical activities. 6. Keep questionnaires as short as you can. Ask only the questions you are sure you need and do not crowd them together. Give respondents enough room to write and be sure each question is set apart from the next. 7. Consider incentive. This may encourage people to respond. These may range from money and stamps to pens or food. 8. Be prepared to follow up or send reminders. These should be brief and to the point. It often helps to send
another copy of the questionnaire. Do not forget to budget money and time for these additional mailings.

Similarly, Nowack (1990) advises that a cover letter addressed personally to each employee and signed by the chief operating officer of the institution should accompany the questionnaire. In addition, Isaac and Michael (1981:136) advise that the cover letter to a questionnaire should "establish a reasonable, but firm, return date." Nowack (1990:84) advises that the cover letter should include "how and to whom respondents should return the questionnaires."

Moreover, Nowack (1990:84) suggests that employees should be advised that they will be receiving a questionnaire:

Alert Managers and employees ahead of time that a questionnaire is being developed and will be sent out. Make special presentations to managers alerting them to the purpose of the questionnaire. Use organizational communication channels such as company newsletters or announcements to describe the importance of the questionnaire and the anticipated use of the results—before it is mailed out. Encourage supervisors and managers to make announcements encouraging employees to fill out questionnaires and to return completed ones during staff and team meetings.

Babble (1975:260) offers the following advice regarding effective procedures for using self-administered questionnaires:

Some recent experimentation has been conducted with regard to the home delivery of questionnaires. A research worker delivers the questionnaire to the home of sample respondents and explains the study. Then, the questionnaire is left for the respondent to complete, and it is picked up subsequently by the researcher. On the whole, the appearance of a research worker, either delivering the questionnaire, picking it up, or both, seems to produce a higher completion rate than is normally true for straightforward mail surveys.

Lastly, when devising procedures for using self-administered questionnaires, researchers should preserve the anonymity of the respondents. Fink and Kosecuff (1985:42) suggest that "the use of surveys and concern for ethical issues are completely interwoven. Surveys are conducted because of the need to know; ethical considerations protect the individual's right to privacy or even anonymity." Isaac and Michael (1981:135) write: "In order to encourage honest and frank answers, some surveys are designed to be returned anonymously. This is more likely to occur where the survey is getting at highly personal or controversial information."
Moreover, Nowack (1990:84) writes: "Make sure that participation is voluntary and either anonymous or confidential. Employees who feel coerced into participating may comply, but may provide incomplete or biased answers."

Based on the review of the related literature regarding the effective development of questionnaires, the Employee Developee Development Committee members developed the goals of the evaluation of the activities of the Employee Development Program. The goals are as follows:

1. To reacquaint all full-time and part-time Maricopa County Community College District Governing Board approved employees at the college with the four goals of the Employee Development Program.

2. To familiarize all full-time and part-time Maricopa County Community College District Governing Board approved employees at the college with the opportunities that the Employee Development Program provides them in the way of activities.

3. To emphasize that participation in employee development activities is voluntary.

4. To inform all full-time and part-time Maricopa County Community College District Governing Board approved employees at the college of the employee development goal or goals that each of the employee development activities were designed to help them meet.

5. To develop a questionnaire designed to:

   a. Determine if employees perceive that their participation in employee development activities was effective in aiding them to achieve the employee development goal or goals for which the activities were designed.

   b. Determine if the members of the four major employee groups (RFP--Residential Faculty, MATP--Management/Administrative/Technical Personnel, M&O--Maintenance and Operations, and PSA--Professional Staff, ) significantly differ regarding their assessments of the activities of the Employee Development Program. (Since the college employs only one person who belongs to the "Crafts" employee group, the Crafts
employee group will be grouped with the M&O--Maintenance and Operations employee group).
c. Determine which of the employee development goals needs more attention in terms of developing activities to help employees meet the goal.
d. Determine if the members of the four major employee groups (RFP--Residential Faculty, MATP--Management/Administrative/Technical Personnel, M&O--Maintenance and Operations, and PSA--Professional Staff, ) significantly differ regarding their assessments of which of the employee development goals needs more attention in terms of developing activities to help employees meet the goal. (Since the college employs only one person who belongs to the "Crafts" employee group, the Crafts employee group will be grouped with the M&O--Maintenance and Operations employee group).
e. Determine the percentage of employee participation in each of the employee development activities.
f. Gain suggestions for new employee development activities that would potentially result in the personal and professional development of the participants. Based on this assessment, the Employee Development Committee members will be provided with data that can help them to make decisions regarding the addition of new employee development activities.
g. Elicit feedback regarding the design and the administration of the questionnaire.

In order to ensure the content validity of the items to be included in the questionnaire, the subcommittee of the Employment Development Committee identified the employee development activities that were designed to provide participants with the opportunity to achieve one or more of the four employee development goals. Some activities were listed under two goals because the committee determined that those activities were designed to help participants meet two of the employee development goals. The subcommittee members presented their findings to
the full committee. The full committee revised the list of activities. This final list was used to develop the questionnaire (Appendix A).

Lastly, in order to ensure the content validity of the questionnaire, informational meetings, led by members of the Employee Development Subcommittee, were held with all employee groups in order to provide all full-time and part-time Maricopa County Community College District Governing Board approved employees at the college with an opportunity to review the list of activities. At these meetings, employees asked questions regarding activities with which they were unfamiliar. Employee Development Subcommittee members emphasized that participation in employee development activities was voluntary. As a result of these meetings, employees at the college became reacquainted with the four goals of the Employee Development Program and became more familiar with the voluntary opportunities that the Employee Development Program provides them in the way of activities. Moreover, employees were informed regarding the employee development goals or goals that the activities were designed to help them meet. In addition, employees were told that they would be eventually invited to complete anonymously a questionnaire designed to evaluate how effectively their participation in the activities helped them to achieve one or more of the employee development goals. Lastly, members of the Employee Development Subcommittee met individually with employees who were unable to attend an informational meeting. The agenda used for the informational meetings was used for the individual meetings with employees.

Based on the goals of the evaluation, a review of the related literature, and advice from three research experts, the Employee Development Subcommittee developed the questionnaire. The full committee reviewed the questionnaire and approved its future use (Appendix B). The questionnaire was designed to evaluate the effectiveness of employee participation in employee development activities in terms of the employee development goals of the college. Activities that were designed for the participation of only one employee group were not included in the
questionnaire. In addition, the questionnaire was designed to generate data that would allow for an analysis of differences among the four major employee groups at the college in terms of perceived effectiveness of the activities of the Employee Development Program. Five research hypotheses were developed to address this concern. The five research hypotheses are stated as follows:

1. Hypothesis One: There are significant differences in the overall mean effectiveness ratings of the activities of the Employee Development Program among the four major employee groups at Paradise Valley Community College Center.

2. Hypothesis Two: There are significant differences in the overall mean effectiveness ratings of the activities designed to meet goal number one of the Employee Development Program among the four major employee groups at Paradise Valley Community College Center.

3. Hypothesis Three: There are significant differences in the overall mean effectiveness ratings of the activities designed to meet goal number two of the Employee Development Program among the four major employee groups at Paradise Valley Community College Center.

4. Hypothesis Four: There are significant differences in the overall mean effectiveness ratings of the activities designed to meet goal number three of the Employee Development Program among the four major employee groups at Paradise Valley Community College Center.

5. Hypothesis Five: There are significant differences in the overall mean effectiveness ratings of the activities designed to meet goal number four of the Employee Development Program among the four major employee groups at Paradise Valley Community College Center.

The questionnaire was also designed to determine which of the employee development goals needs more attention in terms of developing activities to help employees meet the goal. Research hypothesis number six was developed to address this concern. Research hypothesis number six is stated as follows: There are significant differences in the assessments of which of the employee development goals needs more attention in terms of developing activities to help
employees meet the goal among the four major employee groups at Paradise Valley Community College Center.

The questionnaire was also designed to identify the following three factors:

1. The percentage of employee participation in each of the employee development activities included in the questionnaire.

2. New activities that would potentially result in the personal and professional development of the participants.

3. Suggestions for improving the design and administration of the questionnaire.

Finally, the questionnaire was designed so that it could be edited and then used each academic year to evaluate holistically the effectiveness of the activities of the Employment Development Program.

Based on the goals of the evaluation, a review of the related literature, and advice from three research experts, decisions were made regarding the statistical procedures to be used to analyze the empirical data generated from the future implementation of the questionnaire. The following descriptive statistics will be used to analyze the data generated from items two through forty-four:

1. Number and rate of return of the questionnaires for all employee groups.

2. Number and rate of return of the questionnaires per employee group.

3. Mean, mode, standard deviation, and variance for each activity for all employee groups.

4. Mean, mode, standard deviation, and variance for each activity per employee group.

5. Overall mean, standard deviation, and variance for all activities for all employee groups.

6. Overall mean, standard deviation, and variance for all activities per employee group.

7. Mean, standard deviation, and variance for activities designated under each of the four goals for all employee groups.
8. Mean, standard deviation, and variance for activities designated under each of the four goals per employee group.

9. Number of respondents and percentage of respondents rating each activity for all employee groups.

10. Number of respondents and percentage of respondents rating each activity per employee group.

The following descriptive statistics will be used to analyze the data generated from item forty-five:

1. Number of responses for each of the four goals for all employee groups.

2. Number of responses for each of the four goals per employee group.

3. Percentage of responses for each of the four goals for all employee groups.

4. Percentage of responses for each of the four goals per employee group.

In order to test the five hypotheses regarding significant differences in the effectiveness ratings of the activities of the Employee Development Program among the four major employee groups at Paradise Valley Community College Center, five one-way ANOVA tests will be employed. If the F-tests are significant, the Scheffe post hoc test will be employed to discern where the differences are. Lastly, in order to test for significant differences in the assessments of which of the employee development goals needs more attention in terms of developing activities to help employees meet the goal among the four major employee groups at Paradise Valley Community College Center, the Kruskal Wallis one-way ANOVA by Ranks test will be employed.

The three research experts consulted for this study recommended the *General Purpose Data Sheet I* form number 19543 (*General Purpose Data Sheet I*, 1990) (Appendix C) as the form that employees will eventually use to record their responses to the questionnaire items. In addition, the three research experts explained and demonstrated the procedures for scanning
empirical data into an ASCII computer data file using the National Computer Systems Sentry 3000 optical scanning machine owned by Paradise Valley Community College Center. The three research experts recommended that when the completed questionnaires are eventually received, the researchers should number them. This procedure will allow the researchers to spot check the data entry into the ASCII computer data file for accuracy. In addition, the three research experts recommended the use of an IBM-PC and the use of the ABstat version 6.02 computer software statistical program (ABstat, 1989) for analyzing the data generated from the future administration of the questionnaire. Lastly, the three research experts explained and demonstrated how to download the ASCII computer data file into an ABstat version 6.02 computer software statistical program (ABstat, 1989). The Employee Development Committee members accepted the recommendations of the three research experts and decided to hire a research expert to perform the statistical analyses on the empirical data generated from the future administration of the questionnaire.

Based on the review of the related literature and the recommendations of three research experts, the subcommittee developed the following procedure for reporting and analyzing any written responses that may be generated from questionnaire items forty-six and forty-seven:

1. The responses will be recorded verbatim and categorized per employee group.

2. The responses will be analyzed for recurrent themes. If themes develop, those themes appearing three or more times will be recorded in a table that will indicate the number of responses representing the particular themes. The table will also indicate the employee group or employee groups from which the responses came.

Based on the review of the related literature and the recommendations of three research experts, the Employee Development subcommittee members developed a procedure for the future administration of the questionnaire. The population to be surveyed was identified. The Employee Development Committee members decided to survey all full-time and part-time
Governing Board Approved Paradise Valley Community College Center employees: One from the Crafts employee group, forty from the RFP--Residential Faculty employee group, eighteen from the MATP--Management/Administrative/Technical Personnel employee group, twelve from the M&O--Maintenance and Operations employee group, and forty-three from the PSA--Professional Staff employee group (114 employees total).

Based on the review of related literature and on the recommendations of three research experts, a specific procedure for dissemination and collection of the completed questionnaires was developed as follows:

1. The Employee Development Committee members developed a formal letter to accompany the questionnaire (Appendix D).

2. The Employee Development Committee members decided that they would personally invite employees to participate in the survey. This will allow the committee members to reiterate the purposes of the questionnaire, to clarify that the questionnaire is to be filled out anonymously, to explain the directions for filling out the questionnaire, to explain that the questionnaire should be returned to the project director through campus mail, and to inform that a summary of the findings from the survey will be made available to all employees. Since the Crafts and M&O--Maintenance and Operations work different shifts than do the Employee Development Committee members, the supervisor of these personnel will be asked to serve in the place of an Employee Development Committee member.

3. Two weeks before the dissemination of the questionnaire, a notice will appear in the college bulletin announcing the purposes of the survey, the date that it will be disseminated, and a promise that the results of the questionnaire will be made available to all employees.

4. One week before the dissemination of the questionnaire, the Provost will send an electronic message to all employees. The message would again reiterate the purposes of the survey, include an announcement regarding the date of dissemination of the questionnaire,
include a promise to make available a summary of the findings from the survey, and extend a personal invitation to participate. Those employees who do not receive electronic messages will be sent a paper copy of the message.

5. Employees will be given a deadline of one week to return the survey. One working day after the deadline, an electronic message will be sent to all employees. The message will announce that it is still possible to return the questionnaire through campus mail to the project director, and if anyone needs a copy of the questionnaire, a copy can be picked up at the information desk in the Student and Community Services building.

Based on the review of related literature and on the recommendations of three research experts, the questionnaire was field tested. Two representatives from three employee groups (RFP--Residential Faculty, MATP--Management/Administrative/Technical Personnel, and PSA--Professional Staff (six total) filled out the questionnaire and provided feedback regarding their understanding of the purpose of the questionnaire and the directions for filling out the questionnaire. The survey took fifteen minutes on the average to complete. The respondents understood the directions and filled out the survey accurately.

In summary, as a result of this study, personnel of Paradise Valley Community College Center were given the opportunity to be better informed regarding the Employee Development Program at the college and were given a voice in developing the questionnaire that will eventually be used to evaluate the activities of the Employee Development Program. Moreover, the Provost of Paradise Valley Community College Center was provided with a questionnaire that can be revised yearly to evaluate the effectiveness of employees' participation in the college's employee development activities in terms of meeting one or more of the four goals of the Employee Development Program and to generate suggestions for new activities. Lastly, the Provost was given procedures for the future administration and analysis of the questionnaire.
DISCUSSION AND RECOMMENDATIONS

A clear need for the evaluation of the activities of the Employee Development Program has been demonstrated. Based on the results of this study, the Provost of Paradise Valley Community College Center should charge the Employee Development Committee members with the task of administering and analyzing the questionnaire developed for this study. Based on the analysis of the data generated from the future administration of the questionnaire, the Employee Development Committee should make recommendations for the improvement of the Employee Development Program.

If the questionnaire is implemented, the following benefits are possible:

1. Given that employees will have a greater voice in shaping the activities of the Employee Development program, they may come to feel a greater ownership of the program and to perceive their professional and personal growth as a shared responsibility.

2. With greater input from those affected by the program, it is likely that the program will be improved for the better.

3. Based on an analysis of the data generated from the questionnaire, the Employee Development Committee will be provided with a wholistic assessment of the effectiveness of the activities of the Employee Development Program. Based on this assessment, problem areas can be identified and follow-up studies can be conducted with the goal of redesigning or eliminating some of the activities.

4. The Employee Development Committee will be provided with suggestions for additional activities that have the potential for aiding participants in becoming more effective personally and professionally.

5. Employees will perceive that the success of the Employee Development Program is important to the Provost of the college. Based on this concern, employees may perceive that the
their personal and professional growth is of concern to the Provost. This perception could have the ultimate effect of bolstering the morale, motivation, and productivity of employees of Paradise Valley Community College Center.

Furthermore, the Employee Development Committee members should choose an appropriate week in the semester to administer the questionnaire. For example, the weeks of mid-terms and finals are busy times for faculty. Administering the questionnaire during those weeks could be perceived as insensitive and thus could adversely affect the return rate. Lastly, the Provost should invite a member of the M&O--Maintenance and Operations employee group to join the Employee Development Committee. In this way, the Employee Development Committee would be representative of the four major employee groups on campus.

As noted earlier in this study, effective Employee Development Programs are important to the personal and professional success of employees of institutions of higher education. People who are in the business of teaching and learning should be constantly learning themselves. Institutional practices should support these learning efforts.
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APPENDIX A

EMPLOYEE DEVELOPMENT

FOUR GENERAL GOALS
EMPLOYEE DEVELOPMENT

FOUR GENERAL GOALS

1. To give employees an opportunity to understand the mission of the institution and their role.

   All Employee Meeting (called at the start of each semester)
   North Central Accreditation Committees
   Employee group retreat
   Provost’s Open Door Policy
   Immediate Supervisor’s Open Door Policy
   Don Creamer’s Presentation on Student Development
   John Roueché’s Presentation on Student Development
   Employee Reorientation
   New Employee Orientation
   Collegial Support Partnership Program

2. To help employees improve their job performance in terms of effectiveness, efficiency, and personal satisfaction.

   North Central Accreditation Committees
   Employee Group Retreat
   Team Building (Management Development)
   Campus Committees
   John Avlanantos’ Presentation on Goal Setting
   Jim Kern’s Presentation on Wellness/Self-esteem
   Cynthia Scott’s presentation on Wellness in the Workplace
   Brown Bag Sessions
   Wellness Quests
   Wellness Breakout Sessions
   Quiet Room
   S • Care Center
   New Employee Support Program (Transition Aid)
   Employee Wellness Support Program (Individualized Program)
   On-Campus Conferences/Seminars
   Off-Campus Conferences/Seminars
   On-Campus A-1 Training
   MacLicense Training
   Faculty Innovation Series
   Collegial Support Partnership Program
3. To give employees opportunities for professional and personal development.

- Individual Employee Development Plan
- John Avianantos' Presentation on Goal Setting
- Brown Bag Sessions
- On-Campus Conferences/Seminars
- Off-Campus Conferences/Seminars
- Weight Watchers
- Faculty Forums

4. To recognize and reward employees for their personal and professional contributions to the institution on a regular and continuing basis.

- Registration Celebrations
- Holiday Celebration
- Secret Santa
- Employee Recognition/End of the Academic Year Celebration
- Honoring Retiring Employees
- Monthly Potlucks
- Appreciation Cards
- Star Workout Program (Employee Locker Privileges)
- Wellness Week
- Employee Picnics
- Employee Softball
- Employee Golf Tournament
APPENDIX B

EVALUATION OF THE EFFECTIVENESS OF EMPLOYEE DEVELOPMENT ACTIVITIES AT PARADISE VALLEY COMMUNITY COLLEGE CENTER
Evaluation of the Effectiveness of Employee Development Activities at Paradise Valley Community College Center

The purpose of this questionnaire is to evaluate the effectiveness of PCCC's employee development activities in helping you achieve the four goals of the Employee Development Program.

The Employee Development Committee members will analyze the results of this questionnaire and use this information to improve the employee development activities to better help you to achieve the goals of employee development.

1. In order to compare the perceptions of the different employee groups, please indicate the employee group in which you are a member on the "General Purpose Data Sheet I" using the following code:

A = Crafts & M & O; B = Faculty; C = MAPT; D = PSA

GOAL NUMBER ONE: To give employees an opportunity to understand the mission of the institution and their role.

The following employee development activities were designed to provide you with an opportunity to achieve goal number one of the Employee Development Program.

How effectively did your participation (from Fall semester 1988 to the present) in the activities listed below help you to achieve employee development goal number one? Please answer on the "General Purpose Data Sheet I" using the following code:

A = Very Effective; B = Effective; C = Neutral; D = ineffective; E = Very ineffective; If you did not participate in an activity, please leave that item blank.

2. All Employee Meeting (called at the start of each semester)

3. North Central Accreditation Committees

4. Employee group retreat

5. Provost's Open Door Policy

6. Immediate Supervisor's Open Door Policy

7. Don Creamer's Presentation on Student Development

8. John Roueche's Presentation on Student Development

9. Employee Reorientation

10. New Employee Orientation
GOAL NUMBER TWO: To help employees improve their job performance in terms of effectiveness, efficiency, and personal satisfaction.

The following employee development activities were designed to provide you with an opportunity to achieve goal number two of the Employee Development Program.

How effectively did your participation (from Fall semester 1988 to the present) in the activities listed below help you to achieve employee development goal number two? Please answer on the "General Purpose Data Sheet I" using the following code:

A = Very Effective; B = Effective; C = Neutral; D = Ineffective; E = Very ineffective; If you did not participate in an activity, please leave that item blank.

11. North Central Accreditation Committees
12. Employee Group Retreat
13. Campus Committees
14. John Avianatos' Presentation on Goal Setting
15. Jim Kern's Presentation on Wellness/Self-esteem
16. Cynthia Scott's presentation on Wellness in the Workplace
17. Brown Bag Sessions
18. Wellness Quests
19. Wellness Breakout Sessions
20. Quiet Room
21. Self-Care Center
22. Employee Wellness Support Program (Individualized Program)
23. On-Campus Conferences/Seminars
24. Off-Campus Conferences/Seminars
25. On-Campus A-1 Training
26. MacLicense Training
27. Faculty Innovation Series
GOAL NUMBER THREE: To give employees opportunities for professional and personal development.

The following employee development activities were designed to provide you with an opportunity to achieve goal number three of the Employee Development Program.

How effectively did your participation (from Fall semester 1988 to the present) in the activities listed below help you to achieve employee development goal number three? Please answer on the "General Purpose Data Sheet I" using the following code:

A = Very Effective; B = Effective; C = Neutral; D = Ineffective; E = Very ineffective; If you did not participate in an activity, please leave that item blank.

28. Individual Employee Development Plan
29. John Avianantos' Presentation on Goal Setting
30. Brown Bag Sessions
31. On-Campus Conferences/Seminars
32. Off-Campus Conferences/Seminars
33. Weight Watchers
GOAL NUMBER FOUR: To recognize and reward employees for their personal and professional contributions to the institution on a regular and continuing basis.

The following employee development activities were designed to provide you with an opportunity to achieve goal number four of the Employee Development Program.

How effectively did your participation (from Fall semester 1988 to the present) in the activities listed below help you to achieve employee development goal number four? Please answer on the "General Purpose Data Sheet I" using the following code:

A = Very Effective; B = Effective; C = Neutral; D = Ineffective;
E = Very ineffective; If you did not participate in an activity, please leave that item blank.

34. Registration Celebrations
35. Holiday Celebration
36. Employee Recognition/End of the Academic Year Celebration
37. Honoring Retiring Employees
38. Monthly Potlucks
39. Appreciation Cards
40. Star Workout Program (Employee Locker Privileges)
41. Wellness Week
42. Employee Picnics
43. Employee Softball
44. Employee Golf Tournament
45. Of the four Employee Development Goals listed below, which one do you need more attention? Please answer on the "General Purpose Data Sheet 1" using the following code:

A = Goal Number One: To give employees an opportunity to understand the mission of the institution and their role.

B = Goal Number Two: To help employees improve their job performance in terms of effectiveness, efficiency, and personal satisfaction.

C = Goal Number Three: To give employees opportunities for professional and personal development.

D = Goal Number Four: To recognize and reward employees for their personal and professional contributions to the institution on a regular and continuing basis.

46. Please comment on suggestions that you have for additional employee development activities. Please write your suggestions in the "Write-In Area 1" on the "General Purpose Data Sheet 1."

47. Please comment on suggestions you have for improving the design and the administration of this questionnaire. Please write your suggestions in the "Write-In Area 2" on the "General Purpose Data Sheet 1."
APPENDIX C

GENERAL PURPOSE DATA SHEET I

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APPENDIX D

PARADISE VALLEY COMMUNITY COLLEGE

CENTER MEMORANDUM
PARADISE VALLEY COMMUNITY COLLEGE CENTER
MEMORANDUM

Date:

To: (Name of employee)

From: The Employee Development Committee (John Cordova, Marilyn Cristiano, Shirley Green, John Henderson, Ernie Lara, Jerome Baxter, Sue Shuman, Cheryl Kubasch, Karen Watkins, Alexis Thielke, and Loretta Mondragon)

The Employee Development Committee invites you to complete anonymously the enclosed "Evaluation of the Effectiveness of Employee Development Activities at Paradise Valley Community College Center" questionnaire.

All full-time and part-time Governing Board Approved PVCCC employees are being invited to participate in this survey.

The purpose of this questionnaire is to evaluate the effectiveness of PVCCC's employee development activities in helping you achieve the four goals of the Employee Development Program. The results will be used by the Employee Development Committee to better help you to achieve the goals of employee development.

DEADLINE: (DATE)

DIRECTIONS FOR FILLING OUT THE SURVEY:

1. For items 1 through 45, please respond on the enclosed "General Purpose Data Sheet 1." Please use a number 2 pencil. If you have not participated in an activity, please leave that item blank.

2. For items 46 and 47, please respond in the "Write-In Area 1" and "Write-In Area 2" respectively.

PLEASE RETURN THE SURVEY TO (Name of Project Director) THROUGH CAMPUS MAIL BY (DATE)

Thank you for helping the Employee Development Committee to improve the Employee Development Program! A summary of the findings from this survey will be made available to all employees.

Sincerely,

(Signature)

John Cordova, Provost