

AN ABSTRACT OF THE THESIS OF

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This study, based on Brunswik's (1952, 1956) lens model, examined the judgment policies employed by 67 art students and faculty when they evaluate instruction. Four groups of subjects, non-art majors, undergraduate art majors, graduate and bachelor of fine arts students, and faculty members, judged a series of 35 hypothetical teacher profiles containing seven cues relating to teaching ability. It was hypothesized that: (1) no significant difference would exist between cues in weights given them by the subjects; (2) no significant difference would exist between groups in their patterns of cue usage; and (3) subjects would be unsuccessful in subjectively stating their cue usage patterns. Analyses of the data were carried out using correlation and analysis of variance.

Findings indicated that, although cues were differentially weighted within groups, there was little difference between

groups in patterns of information usage. The instructor's knowledge of the subject, his enthusiasm, his ability to communicate, and his degree of supportiveness toward the student were found to be the most heavily weighted factors. The subjects' use of knowledge as a cue was found to be significantly different between groups. Correlations between empirical and subjective judgment policies were found to be in the low moderate range. Results are discussed in terms of the findings of prior studies of teacher evaluation.

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Evaluating the Quality of Teaching in Art:
A Social Judgment Analysis

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TABLE OF CONTENTS

I. Introduction	1
Discussion and Rationale	1
Definition of Terms	7
II. Summary of the Related Research	9
Social Judgment Theory	10
Studies of Student Evaluations	15
Preferences and the Art Student	23
III. Design of the Study	29
Statement of the Hypotheses	29
The Lens Model	30
Description of the Sample	36
Judgment Tasks	37
Data Collection Procedures	40
Methods of Analysis	42
IV. Results	45
Hypothesis I	45
Hypothesis II	50
Hypothesis III	52
V. Summary, Conclusions, and Implications	55
Bibliography	67
Appendix I: Consent Form, Instrument, and Rating Scale	79
Appendix II: Sampling Matrix	89

LIST OF TABLES

I. Mean Utilization Coefficients	46
II. Results of Tukey HSD for Group I	47
III. Results of Tukey HSD for Group II	48
IV. Results of Tukey HSD for Group III	49
V. Results of Tukey HSD for Group IV	49
VI. LSD Test for Cue 6 (Knowledge)	51
VII. Mean Spearman RHO Correlation Coefficients Between Subjective and Derived Weighting Schemes	53

Evaluating the Quality of Teaching in Art:

A Social Judgment Analysis

Introduction

"In the abstract, I believe that creative art is eminent in the university hierarchy of values. But teaching itself is so largely a verbal, a classifying, process that the merely intuitive kinds of knowing, the sensing of things which escape classification, the self-identification with great moods and movements in life and art and letters may be lost or obliterated by the academic routine. They are not to be taught but rather absorbed through a way of life in which intensively developed arts play an easy and familiar part. For it is just such inexact knowing that is implicit in the arts."

. Ben Shahn

Discussion and Rationale

There is a commonly held conviction, one which has received varying emphasis through time, that art is a discipline that cannot be taught. The artist is seen as a unique and separate kind of person, a mad genius or a conduit through which mysterious forces flow and find expression in inexplicable ways. Art is thought to be produced by intuition, an inherent characteristic of the artistic mentality, and is not subject to either the rules of logic or to systematic educational development.

The view of art as essentially unteachable has been alluded to in some form or another by diverse individuals. In philosophy

this view is represented by Plato's conception of the artist as a "light and winged thing, and holy" who composes in the throes of inspiration without the aid of reason. Kant, in The Critique of Judgment, maintained that:

"... since talent, as the productive faculty of the artist, belongs itself to nature, we may express the matter thus; Genius is the innate disposition (ingenium) through which nature gives the rule to art."

A similar theory of art production as an intuitive act which is not under the conscious control of the artist was formulated by Benedetto Croce and later developed by R. G. Collingwood. The artist is seen by them as unique in his artistic vision, an essential element of his nature, and in his ability to externalize precognitive experience. A common thread running through these writings is that the creation of art is not dependent upon reason and that the relationship between experience and art production is such an ephemeral one that its nature cannot be objectively apprehended. Those that believe that art cannot be so much taught as allowed space to grow may be seen as representing an extension of these views in education (Read, 1948).

The belief that the artist is something less and more than an intellectual has influenced attitudes toward art instruction in higher education profoundly. Since the inclusion of art programs in university curriculums in the late nineteenth century, art has occupied a rather special place in relation to the rest of the academic program. However much the university applauds the

achievements of the artist as expressions of cultural development, it seems to be less enthusiastic about the prospect of training the artist. The standard process of instruction is often regarded as foreign to the intuitive process of creating the aesthetic artifact. As a result of this presumption art programs often have the aura of being alienated from the rest of the university. While such alienation may not always be viewed as undesirable by the artist, its effects on the evaluation of instruction may not always be desirable (Shahn, 1958).

Art educators themselves have frequently approached the problem of the evaluation of instruction in art, particularly in its more highly quantified forms with suspicion if not actual contempt (Eisner, 1977). The feeling of many artists and art instructors is that art is essentially unquantifiable, a view that is supported by general stereotypes. Although there has been an enormous amount of theorizing concerning the best selection of curriculum and methods of instruction in the visual arts, research bearing upon the effects of instruction has been relatively sparse. Any discussion of evaluation in art tends, instead, to become mired in the joint problems of values and the formation of adequate objectives. It seems to be an implicit assumption that, if the quality of the artistic product is not measurable, certainly the quality of art instruction, an equally complex and multi-faceted concern, must not be.

Although the truth of the above conception is still a matter of controversy, the view of art as essentially unteachable has been assailed in recent years by forces both within and outside of art education. One strong influence on changing attitudes toward the evaluation of instruction in the arts has been the accountability movement in general education and the rise of student consumerism. While the accountability movement does not have as long a history in the arts as in general education there is an increasing awareness of the necessity of determining the components of successful education in art. Efforts have been directed toward discovering criteria and methods for evaluating teaching quality.

The task of defining teaching excellence has proved to be a complex and controversial one. Since it is difficult to obtain agreement on the criteria for teaching performance, it has been suggested by some researchers in other areas of education that the best subjective judgment is that which is provided by the student (McKeachie, 1969 and Guthrie, 1954 as discussed by Costin, Greenough, and Menges, 1971). The student has had, after all, first hand experience with the teacher's instruction whereas the teacher's colleagues have not. The use of student ratings is based upon this logic. Although the use of student rating forms has been criticised by some sources, they have called attention to the fact that students do judge their instructors and that the basis of their

judgments is an important consideration.

While a substantial body of literature exists in education on the use of student reported evaluations of courses and faculty, the sources of influence upon these reports, and their reliability and validity, some gaps still remain. In applying the results of the work on student evaluations to students in the arts three problems seem relevant. First, the studio areas of the arts often employ quite different methods of instruction than are commonly used in traditional lecture courses. It cannot be assumed that the same criteria will apply to ratings of variously structured courses. Second, students in the arts may actually look at the world differently than students in other disciplines and react differently to instruction on that basis. It is not known if students in the visual arts use the same policies in evaluating their instructors as students in other disciplines or if art students are truly another kind of beast. Thirdly, even though the reliability and validity of ratings may be adequate, it is not certain that any group of students can correctly identify their rating policies. The subjectively expressed preferences measured by most studies may be inaccurate and not represent actual behavior at all (Houston, Crosswhite, and King, 1974).

The problem of describing judgment policies has been extensively considered by researchers in the area of social judgment research. Important aspects of social judgment

research are the use of mathematical models to simulate the judgment processes of the individual and the formulation of the conception of decision making as existing within a larger framework of perception and cognition. The result of this combination is that statistical models have been applied to situations which formerly had been assumed to involve a great deal of intuition on the part of the judge which could not easily be described. Situations which have been studied using social judgment include clinical diagnosis (Hoffman, Slovic, and Rorer, 1968), quality of counseling (Gillis, Stricherz, Beal, and Caskey, 1978), and stock purchasing (Slovic, 1968). The apparent success of social judgment models to describe subtle processes indicates that they may also be useful in studying the process of evaluation in teaching.

This paper will: 1) review the previous research related to the use of judgment policies in rating teaching effectiveness, 2) present a model for studying the evaluative responses of persons involved in the arts, and 3) report on the results of a research project involving these concerns. The purpose of the study is to determine what policies are used by various subsets of individuals involved in the non-academic areas of the visual arts. The study focuses on the dimensions used by faculty and student raters in evaluating teaching effectiveness in studio courses in the college curriculum.

Definition of Terms

In reading this paper the following definitions may be helpful. Other terms which may require definition will be discussed as seems appropriate in the text of the paper.

1. Art is referred to by Webster as the quality or production of that which is beautiful, as a class of objects belonging to this realm, and as a field. It involves the skills, techniques, and manipulations of materials which are organized, communicable and culturally transmitted. It may be thought of as the means by which the artist is united with his public or as an extension of human experience. Art is distinct from games or ritual by virtue of its aesthetic objective.
2. Art education is training in the subject matter and educational processes pertaining to art.
3. Cues are units of information that are used by the individual to formulate judgments. In this study cues consist of aspects of teaching behavior that may be perceived by students and faculty.
4. Cue utilization or cue dependency is the extent to which an individual relies upon a particular cue in forming a judgment.
5. Policies are rules for action. Policies are largely inductive in nature and are based on given data that varies

in concreteness, certainty and degree of relationship to the decision.

6. Policy formation is the ambiguous process of decision making which is partly implicit, partly explicit, partly rule bound, and partly creative. Policy formation contains both analytical and intuitive elements.
7. Probabilistic functionalism is a term used by the psychologist, Egon Brunswik, to denote the uncertain and probabilistic nature of the environment.
8. Representative design is an alternative to the classical approach to experimental design. Originally proposed by Brunswik (1956) representative design allows many features of the environment to vary concurrently.
9. Social judgment theory, developed by K. R. Hammond and associates (1955), maintains that human learning takes place under probabilistic conditions. The task of the individual is seen as one of ascertaining the most reliable sources of information in the environment and combining them in the most appropriate way. The process is necessarily related to the adaptation of the organism.
10. Studio instruction refers to those courses which are directed toward the building of techniques and skills in combination with utilizing principles of art. Studio instruction is distinguished from appreciation, history, or philosophy in method and focus.

Summary of the Related Research:

Social Judgment, Teacher Ratings, and the Art Student

"The paramount fact about human interactions is that they are happenings that are psychologically represented in each of the participants. In our relation to an object, perceiving, thinking and feeling take place on one side, whereas in relations between persons, these processes take place on both sides and in dependence upon one another. . . . We interact with others not as the paramecium does by altering the surrounding medium chemically, nor as ants do by smell but via emotions and thought that are capable of taking into account the emotions and thoughts of others."

. S. E. Asch

Whenever an individual is asked to evaluate another, he becomes involved in the process of decision making. This process has been seen as a complex one involving a combination of cognitive functions including perception, concept formation, thinking, memory, and imagination. The task of the individual when faced with such a problem is to attend to aspects of the person and the environment, order the information in some manner and to generate a decision concerning the characteristics or worth of the other. The judgment is ultimately the result of information provided by the judged person, the situation, and the properties of the individual judge. The process may be regarded as an inferential one involving not only the cues emanating from the individual but also the premises of the

judge (Kaplan, 1975; Sarbin, Taft, and Bailey, 1960; and Taguiri and Petrullo, 1958).

In education, students and faculty are constantly involved in the evaluation process, both formally and on an informal level. Because judgments about the worth of instruction may have important implications for education and may affect both immediate goals and long term attitudes, considerable effort has been directed toward revealing the components of evaluation. In the problem under consideration in this paper, the way in which students in art evaluate the quality of their instruction, three areas of research are relevant. These are: (1) the use of social judgment theory as a framework for studying information usage; (2) research on the components of student ratings; and (3) the special characteristics of the art student which may differentiate him from students in other curriculums.

Social Judgment Theory

Although the origins of judgment research may be traced to the psychophysical formulations of Weber and Fechner (Bieri, Atkins, Briar, Miller, Leaman, and Tripodi, 1966), the major body of work relating to the problems inference, judgment, and choice has taken place within the last 20 years and has involved the development of theoretical models that describe the decision process. This research has largely assumed the form of descriptive studies of the decision process using either regression or

Bayesian statistical procedures (Slovic, Fischhoff, and Lichtenstein, 1977). The individual is viewed as an intuitive statistician who perceives, processes, and evaluates information in the environment in order to achieve the most desirable consequences. The task of the researcher has been to devise ways of capturing the individual's judgment policies.

A significant influence on judgment research may be found in the theory and methodology of Egon Brunswik (1952, 1956). Brunswik emphasized that psychology must not only be concerned with the individual, but must also consider the individual's interaction with his environment. His philosophy of probabilistic functionalism stressed that the organism must try to make sense out of a world that offers it a variety of information of varying uncertainty. In "The organism and the causal texture of the environment" (1935) Tolman and Brunswik stated the matter thus:

. . . . "The organism in its normal intercourse with its environment must cope with numerous interdependent, multiform relations among variables which are partly relevant and partly irrelevant to its purpose, which carry only a limited amount of dependability, and which are organized in a variety of ways."

The process of analyzing the ambiguous information scattered irregularly in the ecological system was, Brunswik believed, necessarily related to adaptation and, therefore, central to understanding psychological processes. In order to understand the person, one must understand the

environment as it is perceived by the person.

Social judgment theory, developed by Hammond and his associates (1964) and based upon Brunswik's formulations, has emerged as a major framework for studying decision processes. The theory maintains that human judgment is based upon both analysis and experience, a mixture that might be called quasi-rational (Hammond and Brehmer, 1973). Quasi-rational thought occurs when the individual is confronted with a decision task in a situation involving uncertainty, a characteristic of most social judgments. In the case of judgments concerning persons, for example, the judge must rely upon aspects of the person's behavior to act as signs of underlying attributes, a situation which is probabilistic at best (Taguiri, 1968 and Rommetveit, 1960).

While it is a truism that, given the same information, people often do not reach the same conclusions, pinpointing the sources of disagreement is not an easy task. Why do people exhibit such lack of agreement in judgmental situations? At least one possibility is that people do not perceive or process information from the environment in the same way. The individual's cue weighting patterns (his reliance on some bits of information over others) and the functional relationships between cues, the environment, and the judge's cue usage have been primary concerns of social judgment research. Gullikson (1964) has noted that not only may the cues themselves vary in degree of actual relationship to the attribute in question, but similar information may be

weighted differently by various individuals.

Differences in cue weighting patterns among individuals given the task of rating others have been found in a number of studies. In studying peer ratings of Air Force cadets, for example, Taylor and Wilsted (1974) were successful in capturing the policies of the raters. They found that a wide range of evaluations of a single person could occur depending on who was doing the rating. In a case even closer to the point, Permut (1973), using a social judgment model, was able to describe the differential weighting schemes among students. The traits used to define the effective instructor clearly differed in degree of saliency among the students.

A variety of explanations have been employed to account for differences in cue weighting patterns among individuals. The interchangeability of cues may allow judges to use differing cues to infer the attribute in question (Brunswik, 1956; Gullikson, 1964; Asch, 1946). The type of interaction the person is engaged in, the goal of the judge in relation to the person judged, and the operation of sets may also determine what information is attended to and how it is used (Bieri et. al., 1966; Jones and Thibaut, 1958). In the previously cited study by Permut, for example, the professor's grading scheme was a major contributor to his judged effectiveness even though most students would not admit to this when asked. The operation of a social desirability set seems to be a likely explanation for this behavior.

Because decision making is quasi-rational and only partly

analytic it is much like what Helmholtz referred to as "unconscious inference". Individuals may be unaware of their schemes for using information and be unable to describe them (Hoffman, 1960; Shepard, 1964; Goldberg, 1968; Slovic, 1969; and Nisbett, 1977). Although an elaborate rationale involving analysis of many diverse kinds of information is often provided when one is asked to describe his decision process, such subjective descriptions have been found to be largely inaccurate. Not only do people prefer to rely upon a priori theories (Todd and Rappoport, 1964) or explanations that seem representative of the stimuli in question (Kahneman and Tversky, 1973), but they appear to use far fewer cues than they report. Indeed there seems to be a tendency for individuals to collapse all of the cues available to them into a very few dimensions. Sarbin, Taft, and Bailey (1960) found, for example, the judges evaluating the potential success of college freshmen actually used only two of the many cues that they had previously maintained were relevant. Similar results have been found in a variety of situations including counselor preference (Gillis, Stricherz, Beal, and Caskey, 1978), judging stocks (Slovic, 1969), conflict resolution (Hammond and Brehmer, 1973), medical diagnosis (Hoffman, 1968) and friendship formation (Rommetveit, 1960). In many situations people simply do not know how they arrived at their judgments.

Even though people may not have access to their cognitive processes to the extent they believe they do, such processes may

still be described. In contrast to subjective reports of decision processes, linear mathematical models have been found to accurately capture cue weighting policies (Goldberg, 1968; Schmidt and Levine, 1977; Hammond, 1976). Slovic, Fischhoff, and Lichtenstein (1977) have reviewed a wide variety of studies which employed mathematical models to study real world decision processes. The general pattern of findings supports the utility of such models.

Studies of Student Evaluations

Like judgment in other social situations, the rating of the quality of teaching involves inference. In order to behave appropriately on a day-to-day basis the student must assess the instructor's traits, intentions, attitudes, and capacities from behavior that is observable by him. In so doing he may be thought of as utilizing these aspects of the person as cues upon which to base his evaluation.

The question of which aspects of teaching behavior are most salient as cues for the student has been a crucial concern for educationists. The literature abounds with attempts to describe the basis of evaluative judgments of teachers and courses. Since none of these attempts deal specifically with art instruction, however, the following review of the literature necessarily comes from general education.

The most frequently used frameworks for studies of student evaluations have been those of factor analysis (Harvey and Barker,

1970; Coats, Swerrenga, and Wickert, 1972) and multidimensional scaling (Subkoviak and Levin, 1974). These studies have resulted in contradictory findings about the characteristics students feel are most important in teaching. One fact that has clearly emerged, however, is that teachers often don't see themselves as their students see them. Centra (1973) found that there is not likely to be a high agreement between student and faculty ratings of faculty members. Further, even if ratings do agree, the basis of the ratings is likely to be different (Wilson, Dienst, and Watson, 1975). While faculty may focus on such items as research production, similar factors are likely to be unimportant to students.

Costin, Greenough, and Menges (1971) have reviewed a series of studies that seem to indicate that students are able to focus on aspects of teaching that are task-related and are not easily led astray by appeals to cheap popularity. Factors that have been found to be important in student judgments include: (1) expert knowledge of the subject matter; (2) ability to communicate and explain clearly; (3) systematic organization of course content; (4) exhibition of warmth and helpfulness in relationships with students; (5) ability to stimulate thought; (6) lack of negative personal characteristics; and (7) flexibility (Smalzreid and Remmers, 1943; Coffman, 1954; Crawford and Bradshaw, 1968; Musella and Rusch, 1968). French-Lazovik (1974), in a series of studies conducted 15 years apart and involving 97,000 students and 277 faculty, found that the professor's ability to explain the

material well and to stimulate interest in his subject were far and away the best predictors of student ratings ($r = .97$). She concluded that, although students may list personality variables such as friendliness, humor, and warmth when asked to describe the ideal teacher, they actually used them very little in rating.

According to these researchers the apparent paradox that students like entertaining teachers may be a pseudo-problem. The entertaining, communicative teacher is also likely to be a "substance" teacher who is generally cultivated, interested in his subject, and fair to his students (Isaacson, McKeachie, and Milholland, 1963). The fact that he uses his good personal characteristics to his advantage does not detract from educational goals.

The conclusion that students focus on behaviors that are logically related to quality of teaching rather than to other less relevant variables is supported by studies which indicate little or no relationship between student ratings and grades, sex of the student or the professor, college year or major in college (Lehmen, 1966; Bendig, 1952; Sockloff and Papacostos, 1975; and Frey, 1975). The results are not unequivocal, however, as other studies have found some positive relationships.

Studies that dispute the notion that student ratings are closely related to actual teaching effectiveness of the instructor rather than other factors are many. Gage (1961) found that teachers of required courses received significantly lower ratings

than teachers of elective courses and that upper division students tend to rate faculty higher than lower division students.

Crittenden and Norr (1975) noticed that students favored small classes, presumably because they allowed the faculty to respond better to student needs. Low positive relationships have also been found to exist between student grades and ratings of instruction (Costin, Greenough and Menges, 1971; Hoffman, 1978; and Sullivan and Skanes, 1974). Similarly, Elmore and Pohlman (1978) found that warm instructors of small classes with students that expect high grades fared best in ratings. It has been suggested, however, that this may be the result of the better student being more interested in the subject or of appreciating better teaching rather than one of self interest (Doyle and Whitely, 1974).

Wittrock and Lumsdaine (1977) have reviewed a series of studies that point to the conclusion that student ratings basically measure irrelevant aspects of instructor popularity. These studies emphasize that ratings have not been shown to be related to student achievement or to the scholarly characteristics of the instructor. The picture of the student that emerges from these studies is one of an individual who is looking for entertainment more than knowledge and prefers being led to being inspired.

Rodin and Rodin (1972) found that students rate most highly those teachers from whom they learn least. The high negative correlation ($r = -.75$) between student ratings of their graduate assistant instructors and their final exam scores was seen to imply

that students may resent instructors who force them to work too hard. The Rodins concluded that student ratings are apt to reflect the personality of the instructor. His academic achievements are less important than his likability.

Naftulin, Ware, and Donnelly (1973) determined that charm and style were indeed important influences on student evaluations of their instructors. They employed an actor, Dr. Fox, who knew nothing of the subject that he was supposed to teach. Dr. Fox gave lectures to four groups of students which included psychiatrists, psychologists, social workers, and educators. The lectures were designed to charm rather than instruct and were filled with numerous logical inconsistencies, neologisms, and double talk. Although his students were highly knowledgeable, Dr. Fox was not detected as an imposter and received excellent ratings.

Although further examinations of the Dr. Fox syndrome (Williams and Ware, 1976) have seemed to confirm the original findings that expressive, exciting lectures result in higher evaluations, the educational seduction paradigm is not without criticism. Criticisms of the Dr. Fox study have pointed out that the lectures pertained to a highly abstract subject and that the students spent very little time with the instructor (Perry, Abrami, and Leventhal, 1979). If the Dr. Fox study suggests that the ability to bamboozle is a potent force in influencing ratings, it is still possible that less dramatic results might have been obtained in a more realistic setting.

Other studies suggest that there may be additional personality factors that exert effects upon ratings. Warmth and the ability to empathize are two such factors. Sherman and Blackburn (1975) concluded, after finding a correlation of $r = .77$ between teacher personality factors and ratings, that teacher personality was the primary determiner of the ratings. Elmore and Lapointe (1975) found that teachers that were perceived as warm and concerned about their students received the highest ratings. Houston, Crosswhite, and King (1974) found that the single policy that best explained student evaluations was concern for the personal characteristics of the instructor, specifically interest and enthusiasm, ability to communicate and motivate, and the ability to maintain good interpersonal relationships.

Nisbett and Wilson (1977) demonstrated that warmth toward his students on the part of the instructor is often a major factor in student preferences. Nisbett staged videotaped interviews using a single individual, a college instructor speaking English with a foreign accent. In one interview the instructor behaved in a warm and friendly manner; in the other he was cold and hostile appearing. When asked to rate the instructor on appearance and mannerisms, students who saw the warm instructor perceived him as charming. The same characteristics, however, were viewed as irritating and undesirable in the cold instructor. Nisbett concluded that when we like a person, we tend to rate all aspects of him more favorably than when we do not.

Further evidence for a "halo effect" in evaluations has been found by studies that have considered the effect of the teacher's reputation on the satisfaction of the student. Perry, Niemi, and Jones (1974) discovered that supplying the instructor with a bogus reputation could influence student opinion independently of classroom performance. Leventhal, Abrami, and Perry (1976) discovered that students who choose classes because of the teacher's reputation are likely to rate him higher than students who are taking the class for other reasons. Even though the possibility exists that students who pick a particular teacher do so because they have a particular interest, it seems likely that knowledge of an instructor's reputation predisposes the student to view him more or less favorably.

It might be expected that students with differing needs would react differently to instructors. Tetenbaum (1977) examined the relationship of the personal characteristics of the student to preferred teacher characteristics. She found that the needs of the student, particularly those for warm, supportive relationships, greatly affected student opinions of their instructors. Students who had particular sets of needs consistently rated teachers whose orientations were designed to meet those needs as better teachers.

Di Marco (1974) reasoned that an individual's life style and general value system would predispose him to prefer certain ways of organizing the classroom and teaching styles over others. After measuring students' learning styles and life style orientation,

he compared the results with their attitudes toward teachers and their classroom organizational preference (self directed, class centered, or teacher centered). Di Marco found that the degree to which the student and teacher shared values was indeed related to teacher preference. Further, there were significant correlations between life style orientation and attitude toward classroom structure. Similarly Rees (1969) found that the personality of the student and that of the instructor were likely to interact with one another.

The tendency for students to rate instructors they like more highly than those that they dislike or are neutral toward has found support in social psychological research. Lott and Lott (1972) have observed a general tendency of people to make more positive judgments of people that they like than those that they do not, to behave as though they expected positive outcomes from liked people and negative ones from disliked, and to judge liked persons as more similar to themselves. A number of studies reviewed by them suggest that better learning, in terms of higher rates of conditioning, greater task persistence, and improved attitudes toward the subject occur when the teacher is an admired person. Liked persons appear to be more effective dispensers of reinforcement, are more likely to elicit approach responses, and are more apt to command attention. Students may thus be more apt to listen to teachers that they like and, providing the teacher can also supply the content, may learn more from him.

Although perceived similarity and liking may improve evaluations, it is not always clear that this is the case. Davison (1973) found that students who thought that their instructor was superior to them on relevant traits, such as expertise in the subject, tended to rate the instructor higher than those who perceived him to be closer to their level. Others have found that, although there is a general tendency for the values of the teacher and the student to be more similar when the relationship is perceived as effective by the student, the relationship is a modest one (Cox, 1968). These studies suggest that there are limits to the warm glow of comradeship.

Preferences and the Art Student

Even if students in lecture courses did seem to exhibit some degree of agreement in the characteristics that they believe represent quality instruction, the question of whether this is true of students in art remains. In art education some impressionistic evidence exists that would support this conclusion. Hardin (1975) found that communication, organization, and enthusiasm on the part of the instructor were considered to be desirable by students in the arts. There were differences in the usual pattern, however. One such difference was the emphasis that art students placed on lack of directiveness and freedom in the classroom.

Barron (1972) developed a similar impression during his research at the San Francisco Art Institute. He found that the successful

art institute student tended to place a higher value on creativeness and autonomy than may be true of students in other disciplines.

Some students at the institute, for example expressed active resentment of close supervision by instructors, assignment of specific problems, and suggestions during the working stages of their pieces. This attitude represents a divergence from the usual preference for a rather high degree of directiveness and suggests that there may be differences within groups of students in how they choose and weight information in judging teaching effectiveness.

Are artists and art students cognitively different from others such that one might expect them to have different cue utilization patterns? A number of studies have attempted to answer this question by comparing the personalities of artists and of art students with persons in other areas of endeavor. Roe (1946) in an early but influential study used projective techniques to study 20 living painters of proven merit. She concluded that there were no personal or intellectual traits and no constraints of life history that characterize all artists and set them apart from other persons. Indeed, the single notable factor of the artists as a group seemed to be their lack of homogeneity. Except for an early interest in art and a total absorption in their work the artists were as like non-artists as they were like each other.

Other researchers, while concurring with Roe that artists frequently do not fit the stereotyped image of them, have found that they may be differentiated from non-artists in psychological structure.

Eiduson (1958) using Rorschach protocols, TAT's, and a 50-item rating scale, found that artists differed from non-artists in thinking and perception if not in developmental and motivational factors. The artists as a group were more prone to look for the novel or unusual, tended to be less interested in the realistic and practical and to be able to produce a richer variety of associations. They were more responsive to sensory stimuli and were able to communicate subtle impressions. The thinking patterns of the artist groups as opposed to those of business executives were found by Eiduson to be marked by elaborated fantasy and ability to loosen controls on thinking without accompanying personality disorganization. Greater tolerance for ambiguity also appeared to be part of the artistic personality.

Rawls and Slack (1968), in a study which was primarily concerned with the discriminatory power of the Rorschach, found that the responses of the artist differed from those of non-artists. Artists were found to have: (1) a greater capacity for perceptual organization (perhaps due to greater experience with visual tasks); (2) more flexible thinking patterns; and (3) greater task involvement in responding to the Rorschach. They were also seen to have greater emotionality (FC response), capacity for empathy, tolerance for change and ambiguity, and willingness to express unconventional ideas. Similar findings are reported by Barron (1972), Eiduson (1958), and MacKinnon (1962). Frenkle-Brunswik (1947) has identified one of these characteristics, tolerance for ambiguity, as being a general

personality characteristic that particularly influences the individual's ability to be open to experience and to perceive the world accurately.

While the above research has primarily utilized artists who were stable in their vocations, similar results have been obtained when students were used as subjects. Holtzman, Schwartz, and Thorpe (1971) compared art students to students in architecture and engineering in perceptual style and accompanying personality factors. Using a variety of testing procedures, they found the artists to be freer, less reality oriented, more bizaare in verbalization and quicker in responding than non-art majors. Barron's students exhibited like characteristics. In addition Barron noticed that they were far less interested in social conformity than other students and exhibited what he termed "a slight swagger to the life style". They tended to see their art as their most important source of growth and to pursue their work independently.

Dellas and Gaier (1970) in their review of the research relating to the cognitive and personality orientations of creative individuals have presented lists of characteristics which are consistent with the above discussion. These characteristics include the ability to think divergently, to be cognitively flexible, fluency, sensitivity to problems, spontaneity, adaptibility, and preference for complex organization. In the personality area such individuals seem to exhibit a tendency for independence, autonomy, unconventionality, openness to feelings, and broad interests more

than less creative persons. Such qualities seem to appear consistently in discussions of persons interested in creative endeavors.

Studies of cognitive style of students in various majors have indicated that the style of the learner is often adapted to that of the major. Gaines (1975) found that the characteristics of artists were suited to their work. Artists were found to be field independent, flexible in perception, and were primarily "relational" in style. Goldman and Hudson (1975) also found differences in learning strategies for students in differing majors which were related to success in the major. The requirements of different fields seem to demand different kinds of persons. The way that the artist perceives and orders his experience may be different than that of non-artists even though there are no specific developmental factors which lead him to his profession.

Do the differences that artists seem to exhibit imply that the preferred modes of instruction will be different for art students or that art students will be more cognizant of what they are than other students? The suggestion is that this is possible. The bulk of the evidence relating to the personality structure of the artist indicates that he has a particular need for independence, values non-conformity and originality, and is generally open and flexible in his thinking. Certainly the nature of his profession, which demands much in personal commitment but offers little in the way of firm promises of support, would seem to require a particular kind of individual. Even though most of the research in this area

has been done with artists that are proven in their area of endeavor, students in art seem to have much in common with them. It is likely, then, that art students do view instruction differently than other students and that these differences are in directions that are congruent with their personality structures. These possibilities have only begun to be empirically examined, however. The influence of the artist's personality on his evaluation of instruction is yet to be considered.

Design of the study

"The universal lawfulness of the world is of limited comfort to the perceiver of behavior not in a position to apply these laws, and he, therefore, must rely largely on whatever snatches of particular or semigeneralized information he may be able to assemble. This is what we meant by the assertion that ordinarily organisms must behave in a semi-erratic ecology."

. Egon Brunswik

The following section includes a discussion of the design and methods employed in collecting and analyzing the data. The hypotheses are listed and the model, which served as a conceptual organizer for the study, is described and its terms defined. For purposes of clarity the procedures involved in obtaining the sample, in preparing, pretesting, and administering the instrument, and of analyzing the data are discussed in phases.

Statement of the Hypotheses

It will be recalled that the purpose of the study was to examine the pattern of information usage in student and faculty evaluation in the arts. The specific hypotheses of the study are as follows:

- 1) There will be no significant difference between cues used to assess teaching excellence in the weights¹ given them by subjects.

¹For the purpose of this study cue weights are indicated by correlation coefficients.

- 2) There will be no significant difference between the groups, non-art majors, art majors, BFA and graduate students, and faculty, in their cue utilization patterns.
- 3) Students and faculty in the arts will be unsuccessful in subjectively stating their cue usage patterns.

The Lens Model

Because judgments concerning the value of one's instruction require that the individual collect or combine information, both the characteristics of the person and of the information available to him are of interest. On the one hand the environment presents information that is only partly accessible to the individual and is, most frequently, imperfectly related to the particular judgment task that he faces. On the other hand, a person's individual predispositions and patterns of learning act to determine which information is likely to be selected. Given the differences between people and the probabilistic nature of the environment, it is unlikely that any single strategy will be used by all persons. It can be seen from social judgment research that the problem of determining what strategies are used is further complicated by the individual's seeming inability to describe his judgmental processes. How, then, may an individual's decision processes be captured?

A method for determining how information is used by diverse people has been suggested by Egon Brunswik (1952, 1956) in the form of a quantitative paradigm called the "lens model". The graphic

presentation of the lens model is seen in Figure 1 (Hoffman, Slovic, and Rorer, 1968).

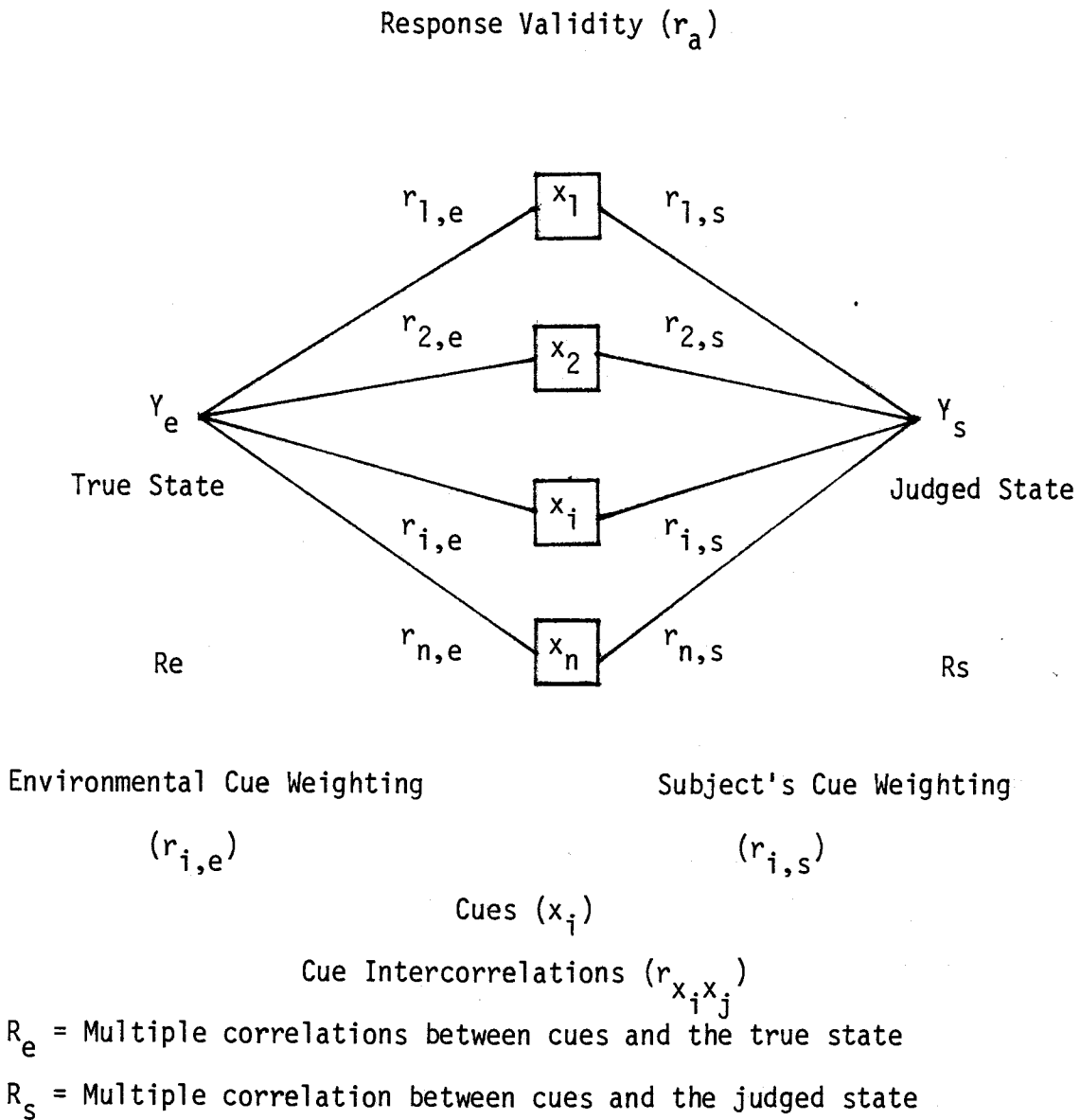


Figure 1. The Lens Model

The model is correlational, is capable of describing the relationship between true states of the ecology and judged ones, and allows for quantification of that relationship. Brunswik saw the lens model as representing the essential circumstances of human cognition. His feeling for the importance of the model in understanding human thought is indicated in his statement that:

"The general pattern of mediational strategy of the organism is predicated upon the limited ecological validity or trustworthiness of cues . . . This forces a probabilistic strategy upon the organism. To improve its bet, it must accumulate and combine cues . . . Hence the lens-like model . . . which may be taken as the basic unit of psychological functioning." (Brunswik, 1956)

This conception of the functioning of the individual was intimately tied to Brunswik's concept of representative design and provides a method of handling the concurrent variation in multiple variables.

The essence of the lens model is that it depicts a distal state which an individual would like to predict on the basis of proximal information that is available to him. The distal state is, then, a condition that exists in the real world but must be inferred by the judge. Informational bits that are gathered by the individual and used to predict this state are referred to as cues and are symbolized $x_1, x_2 \dots x_n$. These cues constitute independent variables.

Although each cue has a degree of relationship to the state of the distal variable (Y_e), called a criterion value (r_{ie}), the relationship is rarely known by the judge with certainty. The individual is faced with the problem of determining which cues

will be most helpful and combining them in a way that will maximize the accuracy of his judgment (Y_s).

Examination of the graphic presentation of the model will reveal that the lens model employs a system of parallel concepts. Each concept on one side of the model is reflected by a corresponding concept on the other side. The left side of the model depicts ecological validities ($r_{x_n y_e}$). Ecological validities are representative of the extent to which a particular cue really is related to a true state. These relationships set an upper limit to the amount of accuracy that any judge can attain.

The right side of the model depicts utilization coefficients ($r_{x_n y_s}$). These coefficients reflect the frequency of association of a cue with a response. In addition the coefficients on both sides of the model may exist in various relationships to each other. These relationships, or "function forms", may be positive, negative, or curvilinear.

The model provides a number of statistical indices for evaluating the cognitive system of the individual, the environment, and the relationship between the two. Since it may be beneficial to clarify some aspects of the functioning of the model some concepts will be briefly reviewed.

1. Cue dependency refers to the degree to which an individual relies upon any one cue in making his judgments. An index of cues dependency may be obtained from observing the variation in the

person's judgment with systematic changes in levels of cues. Utilization coefficients may be developed for each and will estimate the individual's cue usage. The nearer that this index approaches +1.00 or -1.00 the more the judge is relying on the cue to make a judgment.

2. Judgment policies of any individual consist of the individual's method of weighting and combining the cues available to him. This strategy can be determined by multiple regression procedures. The regression procedure is modeled by the following formula:

$$\hat{Y} = a + b_1X_1 + b_2X_2 + \dots + b_kX_k$$

3. Ecological validities (ie., correlations between cue and criterion values) are the indices of usefulness of the cues in predicting the criterion value.
4. Cognitive control is the correspondence between the individual's judgments and predictions derived from the model.
5. Achievement and knowledge are additional measures which the model is capable of providing. These measures represent the relationship between the judge's belief in the true state of the ecology and its actual condition. Achievement (r_a) is an index of the accuracy of the judge in predicting the criterion. Knowledge (G) is the relationship between the individual's cognitive system and the environmental criterion. A high G

indicates that the individual is aware of the requirements of the task. Achievement differs from knowledge in that it includes what the individual is actually able to accomplish.

The lens model equation has been variously stated (Hammond, Hursch, and Todd, 1964; Hammond, Stewart, Brehmer, and Steinman, 1975; Tucker, 1964). The most widely used formulation is that proposed by Tucker. The formulation may be expressed as:

$$r_a = GR_e R_s$$

It may be seen that the formula states that the individuals achievement (r_a) is dependent upon his degree of knowledge (G), the degree of certainty in the task (R_e), and consistency (R_s). The foregoing discussion includes all of the major parameters of the model.

Although the lens model is capable of taking into account the statistical characteristics of the environment, of the organism's response, and the extent to which the two match each other, this complete analysis is not always desired. In situations where the optimum judgment is not easily determined the complete analysis may be inappropriate. Variations of the model have been developed which may be used where only the cognitive system of the individual is available for study. The emphasis in the single system application of the model is not with how successful the individual is in judging the criterion, but on describing the individual's policy, be

it successful or not. The concern in this case is to identify the cues that are used, how they are weighted, and to develop a conception of the individual's function forms. Since there is no completely agreed upon criterion of excellence in instruction, the rating of instruction seems to be a situation where the single system method might be appropriately applied.

Description of the Sample

The sample of judges used in this study consisted of students and faculty involved in the art program at Oregon State University. Subjects were divided into four groups on the basis of experience and presumed degree of involvement in the arts. The groups, listed in order of involvement are: 1) non-art majors who were enrolled in an art course, 2) undergraduate art majors, 3) Bachelor of Fine Arts students (BFA) and graduate students, and 4) art faculty. Due to the paucity of available subjects in segments of the subject pool, sample size of some of the groups was limited. The actual sample size of the groups was:

1) Group I (non-art majors)	20
2) Group II (art majors)	20
3) Group III (BFA, graduate)	15
4) Group IV (faculty)	12

Although the sample size for some of the groups was limited, the number of judgments in each case was large.

The logic behind grouping the BFA students, who are really

undergraduates in a concentrated program, in a separate group with graduate students was that the additional length of the program implies that these students are likely to have a higher interest in art than the average undergraduate. The requirements of entering the BFA program, that of submitting a portfolio of prior work to be judged and presenting a rationale for the work, are also similar to the requirements of entering an MFA program although the acceptance criterion might not be as rigorous.

Judgment Tasks

From a perusal of the literature concerning teacher evaluations it became clear that certain characteristics were cited repeatedly as determining much of the variance in teacher ratings. Seven teaching behaviors were chosen as particularly important. They were: (1) degree of supportiveness and warmth on the part of the faculty person toward the student; (2) degree to which the faculty person directed the student's work and set particular guidelines for him to follow; (3) the faculty person's enthusiasm in the classroom; (4) creativeness in presenting the material; (5) the faculty person's ability to communicate the course material; (6) his knowledge of the material; and (7) the faculty person's degree of research involvement. In the case of art faculty, research involvement was thought to be more appropriately termed involvement in the individual's own personal

creativity and exhibiting. These behaviors became the cues for the judgments.

When the literature on the personality structures of creative artists was consulted, it became apparent that a number of these characteristics might assume different importance to art students than they commonly do to other groups. It was especially suspected that art students would place less emphasis on being told what to do in favor of being given latitude for greater flexibility and creativeness.

Cue values for the seven cues were generated through the use of a random number table. Cues were arranged to vary over five levels, from low (1) to high (5), for each of 35 hypothetical teacher profiles. In this process it was found that not all the profiles were sensible. That is to say, one could not possibly think of an individual who could have certain patterns of characteristics. It is, for example, difficult to imagine a teacher who is not enthusiastic about his subject, knows little, and has a low level of communication skills who could also teach creatively. Some winnowing of the profiles was, therefore necessary to simulate reality.

A variety of formats for presenting the cue values to subjects were developed. These included verbal written descriptions and graphic presentations in the form of bar graphs and profiles. Samples of these formats were presented to a small sample of students ($n = 12$) in order to determine which format was the

easiest to complete. On the basis of this pilot study it was determined that the written form, at least for art students, was completed more quickly and generated fewer difficulties than the graphic forms. Since the instrument was to be somewhat lengthy, this was seen as an important factor in the final choice.

Written vignettes were thus constructed around the sets of seven cues with the cues randomly shuffled within them. Adjectives were associated with each cue to indicate to the subject the level of the cue. The lowest level of directiveness, for example, was indicated by the assertion that teacher (n) is never, or almost never, directive. At the second level the teacher was described as being occasionally or sometimes directive. Adjectives associated with cue levels 3, 4, and 5 were respectively "generally", "frequently" or "often", and "always" or "almost always".

Simulation of teaching situations through the use of short written descriptions has previously been attempted (Tetenbaum, 1977; Gillis, Stricherz, Beal, and Caskey, 1979) and has been found to have some advantages. Written descriptions allow for greater control of extraneous variables than would be possible if the subjects were asked to evaluate a real situation. Secondly, although there is some loss of generalizability through simplification of the subtle, complex, and multidimensional process of teaching, the method creates a condition which is similar to the manner in which cues may be dealt with in a real-life situation.

This similarity results from the cues being embedded in some context as would be the case in most evaluation situations.

The final instrument consisted of 35 vignettes each containing 7 teacher characteristics having values ranging from 1 to 5. Subjects were told that the vignettes represented hypothetical instructors in the arts that exhibited certain behaviors with varying degrees of frequency. The instructions to the subjects contained on the instrument listed adjectives that were associated with levels of frequency of each of the cue behaviors. The subjects, therefore, had a scale before them which indicated that "never" meant that the behavior occurred less than 20% of the time, "occasionally" meant 20% to 40% of the time and so on (see Appendix I). Subjects could refer to the scale as they proceeded through the task.

Data Collection Procedures

The survey instrument was administered to the student groups during a class period. The choice of class was influenced by the numbers of students in each of the groups enrolled in the class and the willingness of the faculty member to allow his or her students to participate. Faculty were, for the most part, cooperative. Classes in which the questionnaire was administered included Basic Design, Graphic Design, Drawing, Painting, Printmaking, and a BFA seminar.

The administration of the survey instrument began with a

review of the instructions. Instructions to the subjects paralleled those listed on the first page of the survey instrument. Subjects were told that each profile represented a hypothetical instructor and were asked to read the profiles and rate each instructor's excellence on the accompanying scale. It was explained that a rating of 1 indicated that the instructor was poor, that a rating of 20 signified a high degree of excellence, and that most of the hypothetical teachers would fall in between these extremes. Subjects were, further, instructed to proceed directly through the profiles without skipping or returning to profiles once they had finished them.

Once the subjects had completed the major portion of the questionnaires, they were instructed to complete the subjective rating on the last page of the instrument. Subjective ratings required subjects to distribute 100 points between the seven cues. This task provided an index of which cues the subjects believed that they relied upon in their judgments.

The above description outlines the tasks of all subjects. The initial phase provided the data for determining the empirical judgment policies of the groups. The second task (subjective rating) provided an estimate of how well subjects knew their own judgment policies. If subjects were aware of their cue dependencies, one would expect the rank order correlation index to approach $r_s = 1.00$. If not, then a low correlation should be obtained.

The procedure for administering the questionnaires to the faculty was somewhat different. Faculty subjects were introduced to the project and the instrument and given instructions in a faculty meeting. The questionnaires were distributed and the individual completed the questionnaire at his or her own convenience. The response rate for the faculty was 80%.

In all cases, participation in the study was on a voluntary basis. Prior to participation subjects received a consent form (see Appendix I) which is required of all experimental participants by the university. If the subject agreed to participate, this form was completed and returned with the finished questionnaire. Consent forms were placed in a permanent file. Data were summarized and filed separately.

Methods of Analysis

The indices of interest in this study include those that have to do with the policies of judges. These indices include individual cue dependencies and strategies for combining cues as well as relationships between empirical and subjective judgment policies. The procedural sequence of these analyses is presented below.

Since a primary purpose of the study was to determine the extent to which certain teaching dimensions were relied upon in evaluating instruction, Pearson product moment correlations were

computed between cue values (x_i) and responses (Y_s) over the 35 rating trials. The cue utilization coefficients ($r_{x_i y_s}$) provided indices of the degree to which cue usage varied with the response of the subjects over the series of trials. A correlation was thus determined between the individual's rating and each of the seven cues. An analysis of variance within each group was used to determine if the weightings given the cues differed significantly. This test was followed by a Tukey multiple mean comparison test which compared the mean responses to the cues within each group and indicated the location of the differences.

Cue utilization coefficients were converted into standard scores using Fisher's r to z transformation (Steel and Torrie, 1960). As explained by Downie and Heath (1974) converting correlation coefficients to standard scores allows them to be averaged. Since it was desirable to determine how the four subject groups varied in their patterns of cue usage, mean utilization coefficients were developed using these scores. Coefficients were subsequently subjected to seven one-way analyses of variance to determine the extent to which cues were used differently among groups. A significant difference was considered to exist if the computed F equaled or exceeded the tabular F ($p < .05$, df 3, 63). An application of a comparison test indicated the location of the difference.

The final analysis completed was the comparison of the subjectively stated judgments of cue importance with the

empirical ones. Spearman's rank order correlation (r_s) was used as an index of this relationship. The signs of the empirical weights were disregarded in the comparison. Mean Spearman's rho coefficients for each group were developed and an Anova was completed within each group to determine if accuracy differed significantly between subjects within groups. Subjects were arbitrarily considered to be inaccurate if the correlations between subjective and empirical schemes did not equal or exceed $r_s = .60$.

Results

"I do not like thee, Dr. Fell; the reason why I
cannot tell.

. Nursery Rhyme

This chapter describes the results of the study. The findings are organized on the basis of their relationship to the three hypotheses.

Hypothesis I

The first hypothesis stated that there would be no significant difference in the weighting of cues used by subjects in assessing teaching excellence. Cues would assume equal importance in the weighting hierarchy.

In order to test this hypothesis, the importance of each cue in the individual's judgment policy was determined by determining cue utilization coefficients between the subject's judgments and the five levels of the seven cues within each profile. The Pearson "r" correlation coefficient was used to measure the relationship between cue values and judgments over the 35 trials. As previously stated the correlation coefficients were transformed to "z" scores for subsequent analyses (Downie and Heath, 1974).

Mean utilization coefficients for each judgment group in the form of "z" scores were computed. The mean utilization coeffi-

cients are presented in Table I. This analysis provided an estimate of each group's cue usage and indicated that the cues did not appear to be of equal importance to the subjects. Cues weighed most heavily in the judgments were supportiveness, enthusiasm, communication skills, and knowledge. The remaining cues appeared to bear little weight in the evaluation decisions.

Table I. Mean Utilization Coefficients

Cues	Groups			
	I Non-Art	II Art	III Grad/BFA	IV Faculty
Supportiveness	.2378	.1349	.2067	.1027
Directiveness	-.0119	-.0487	-.0663	-.0371
Enthusiasm	.2810	.2560	.3193	.2078
Creativity	-.0538	-.0356	-.0498	-.1045
Communication	.1648	.2277	.1321	.1958
Knowledge	.1774	.1920	.3421	.3125
Exhibitions	-.0172	-.0464	.0018	.0521

The significance of the difference between the cue weightings was determined by an analysis of variance conducted using the Pearson "r" correlation coefficients within each of the four groups. Cue usage was found to be significantly different within all groups (Group I, $F = 10.3805$, $df\ 6, 133$, $p < .0001$; Group II,

$F = 13.9827$, $df\ 6, 133$, $p < .0001$; Group III, $F = 20.9809$, $df\ 6, 98$, $p < .0001$; Group IV, $F = 6.7672$, $df\ 6, 77$, $p < .0001$). Hypothesis I was, therefore, rejected.

The analysis of variance was followed by a Tukey HSD multiple mean comparison test to determine the location of the difference within each group (Steel and Torrie, 1960). The results of this test are reported in Tables II - V. It may be seen that the tests confirm the impression given by the mean utilization coefficients.

Table II. Results of Tukey HSD for Group I

Cue	Group Mean	
Creativity (4)	-.0529	Subset 1
Exhibiting (7)	-.0159	
Directiveness (2)	-.0118	Subset 2
Communication (5)	.1549	
Knowledge (6)	.1689	Subset 3
Supportiveness (1)	.2280	
Enthusiasm (3)	.2669	

$p < .05$

Table III. Results of Tukey HSD for Group II

Cue	Group Mean	
Directiveness (2)	-.0468	Subset 1
Exhibiting (7)	-.0446	
Creativity (4)	-.0343	
Supportiveness (1)	.1304	Subset 2
Knowledge (6)	.1855	
Communication (5)	.2178	
Enthusiasm (3)	.2460	

$p < .05$

The above tests indicated that for both of the undergraduate groups the instructor's enthusiasm for his subject matter and for teaching was the most important factor with communication skills, knowledge, and supportiveness toward students being statistically indistinguishable from that factor. The degree that the instructor directed the class activities and his communication skills could not be separated from each other by the test in the case of the undergraduate students from majors other than art. Art majors weighed these two factors in clearly differing manners with directiveness being given the least importance. The instructor's ability to communicate, on the other hand, was one of the most important factors. Neither group thought that the instructor's creativity or his degree of professional involvement as indicated

by his exhibition record was particularly important.

Table IV. Results of Tukey HSD for Group III

Cue	Group Mean	
Directiveness (2)	-.0651	Subset 1
Creativity (4)	-.0493	
Exhibiting (7)	.0018	Subset 2
Communication (5)	.1299	
Supportiveness (1)	.1977	Subset 3
Enthusiasm (3)	.3039	
Knowledge (6)	.3183	Subset 4

$p < .05$

Table V. Results of Tukey HSD for Group IV

Cue	Group Mean	
Creativity (4)	-.0997	Subset 1
Directiveness (2)	-.0364	
Exhibiting (7)	.0382	Subset 2
Supportiveness (1)	.1012	
Communication (5)	.1845	Subset 3
Enthusiasm (3)	.2019	
Knowledge (6)	.2929	Subset 4

$p < .05$

Groups III and IV differ from Groups I and II in weighting knowledge of the subject matter most heavily and in degree of overlap between the factors. The general pattern of cue weighting is, however, similar between the groups. Discussion of the clustering of the cues in subsets within groups III and IV follows.

In Group III cues 2 (directiveness), 4 (creativity), and 7 (exhibiting) formed the first subset. These cues could be distinguished from cues 5 (communication), 1 (supportiveness), 3 (enthusiasm), and 6 (knowledge). Cues 7 and 5 were indistinguishable from each other as were cues 5 and 1. Cues 1, 3, and 6 formed the fourth subset.

Group IV, faculty, had the greatest amount of overlap among the cues. Cues 4 (creativity), 2 (directiveness), 7 (exhibiting), and 1 (supportiveness) formed the first subset. These cues overlapped with the remaining cues in a stepwise fashion. Cue 4 could be distinguished from cues 5, 1, and 6. Cue 2 could be distinguished from cues 1 and 6. Cue 3 could be distinguished from cue 6.

Hypothesis II

The second hypothesis stated that there would be no significant difference between the groups in their patterns of cue usage. In order to test this hypothesis seven one-way analyses of variance were conducted, one for each cue, across all groups. The

analyses yielded only one significant difference. The instructor's knowledge of the course material that he was teaching was differentially weighted by the groups ($F = 3.067$, $df\ 3, 63$, $p < .05$). Although the Anova indicated a statistically significant difference, a subsequent application of a Tukey HSD Multimean Comparison test was unable to establish the location of the difference. A computation of an alternate test, the Least Significant Difference test, revealed the results presented in Table VI.

Table VI. LSD Test for Cue 6 (Knowledge)

G_1	.1774			
G_2	.1920			
G_4	.3125			
G_3	.3421			
		.0146	$M_1 = M_2$	
		.1205	$M_2 < M_4$	
		.0296	$M_4 = M_3$	
LSD ($t = .05$, $n = 35$) = .0923				

The findings indicate that the instructor's apparent expertise was most important to BFA and graduate students and least important to the non-art majors taking a single art course. Faculty weighted this factor heavily but not so much as their upper-division and graduate students. The significant difference existed between the means of Group II (art majors) and Group IV (faculty).

An additional cue which may merit attention is that of the

degree of supportiveness offered by the supposed faculty person to the students. Profiles that implied that the instructor had a high level of this factor indicated that he was always supportive, interested in students, focused on good points in criticizing student work, and so on. Although significance was not reached on this cue ($F = 2.1635$, $df\ 3, 63$, $p = .10$), the cue was of interest because the groups aligned themselves in a somewhat unexpected manner. Graduate and BFA students were found to weight the cue almost as heavily as the non-art majors. Faculty weighted the cue the least of the four groups.

Hypothesis III

The third hypothesis stated that students and faculty in the arts would be unsuccessful in stating their cue usage patterns. To test the effectiveness of subjects in subjectively expressing their judgment criteria, Spearman's rho (rank order correlation) coefficients were computed between the statistically derived rating schemes and the schemes that the subjects said that they had used. These correlations (r_s) indicated the extent of agreement between subject's empirically derived correlations, disregarding the signs, and their introspective weights. The results indicated that the ability of subjects to state their judgment policies varied considerably. Although correlations ranged from $r_s = .00$ to $r_s = .95$, most correlations fell in the low moderate range. Mean Spearman rho coefficients representing group accuracy are presented in Table VII.

Table VII. Mean Spearman Rho Correlation Coefficients
Between Subjective and Derived Weighting
Schemes

Groups	$\bar{X}r_s$	SD
I. Non-Art Majors	.36	.32
II. Art Majors	.36	.19
III. Grad./BFA	.45	.31
IV. Faculty	.42	.25

Because there seemed to be such variation in accuracy within the groups, analyses of variance were conducted within each group to determine the significance of the differences. The analyses indicated that within Groups I, II, and IV differences were significant. F probabilities for these groups were uniformly $p < .001$. Individuals in Group III, BFA students, were not significantly different, one from the other, in their accuracy ($p = .07$).

The above analyses led to the conclusion that subjects were inaccurate in their abilities to delineate their policies.

The results of this study indicate that, although informational components are differentially weighed by individuals when they evaluate teaching effectiveness, there are few differences between groups in which factors are considered most important. It has further been indicated that statements made by the person concerning

his criterion of effectiveness may bear little resemblance to his actual judgment scheme.

"We consider it a great thing in education that the learner be taught to rely on himself. The best teachers do not profess to form the mind but to direct it in such a manner . . . and put such tools in its power that it builds up itself."

. Walt Whitman

Over the years hundreds of items have been included on rating forms and numerous studies have been conducted to determine which of those items are contributors to instructional evaluation. The literature has indicated that some of these factors have seemed to recur repeatedly and account for much of the variance in ratings. This study attempted to determine if a particular subset of the university population, students and faculty in the visual arts, used the same judgment policies as students in other disciplines, if there were differences between various subgroups in this sample, and if the subjects were aware of their judgment policies. This section considers the results of the study and their implications.

Summary

The task of subjects involved in the study was to judge a set of profiles representing hypothetical instructors. The informational cues supplied as a basis for judgment were derived from a literature survey. Of the seven cues used in the profiles, knowledge, communication skills, directiveness, enthusiasm, and

supportiveness have been found to weigh heavily in teacher ratings among college students. Two other cues, creativity and exhibition involvement seemed plausible additions to this list because of their importance in the arts.

Analyses of data involved correlational procedures to measure the relationship between cue values and criterion response values. The process yielded cue utilization coefficients for each of the seven cues over the 67 judges. The correlation coefficients were transformed to "z" scores and subjected to analyses of variance. Subsequent application of multiple mean comparison tests located differences between means of the groups and, within each group, in cue weightings. In order to determine the effectiveness of the judges in stating their patterns of cue usage, subjective and obtained cue rankings were compared using Spearman's rho correlation procedures.

Conclusions

Although faculty have sometimes opposed student ratings as being misleading, the results of this study indicate that there is very little difference in the bases of evaluation between faculty and students within the arts. Both art students and faculty prefer a teacher who is knowledgeable, enthusiastic about his subject matter and about teaching, able to communicate what he or she knows, and evinces a supportive attitude toward the student. Although within group comparisons indicated that there

were significant differences in the amount of weight given each cue in evaluation policies, differences between groups in patterns of cue usage did not, for the most part, reach significance.

Thus, while students may order cues somewhat differently from faculty, all groups tended to rely most heavily on similar information. This finding contradicts those of researchers (for example Wilson, Dienst, and Watson, 1975) who have suggested that the bases of ratings of faculty are likely to differ between faculty and students. It may also imply that some agreement should exist between faculty and students in their opinions of what constitutes quality instruction.

The single area of difference in cue usage between the groups is, however, one which is apt to cause some concern when student ratings of faculty are interpreted. Even though within group tests indicated that knowledge formed a subset with supportiveness, communication, and enthusiasm in the undergraduate groups, the data revealed a tendency for students to undervalue the faculty person's knowledge in favor of items that seem more related to personal popularity. This tendency occurred in both of the undergraduate classifications but was particularly true of the students from majors other than art. Among these students the instructor's enthusiasm was found to be the most heavily weighted variable with supportiveness ranking second. Among the undergraduate art majors who were not BFA students enthusiasm and communication skills were of almost equal importance. These results might be seen as support-

ing those of other researchers (Rodin and Rodin, 1973; Houston Crosswhite, and King, 1974; Naftulin, Donnelly and Ware, 1973; Elmore and Lapoint, 1975; Hardin, 1975) who have found that enthusiasm, warmth, and ability to talk are good predictors of student ratings. These findings also contradict the group of studies that have found the perceived skill and expertise of the instructor to be the major factor in student ratings.

The fact that the groups did use knowledge as a cue differently, one from the other, opposes studies that have found similar emphasis on this factor between students and faculty. Here emphasis upon knowledge was found to increase with experience in the arts. The one exception was that BFA and graduate students seemed to value instructor expertise even more than the faculty. A possible explanation, one that would be consistent with the findings of Tetenbaum (1975), may be that faculty members are more sensitive to the multidimensional requirements of teaching while students are primarily concerned with satisfying their own needs. At more advanced levels these might logically be assumed to be more information-related.

A focus on factors other than knowledge was found to occur in both of the undergraduate classifications but was found to occur most among non-art majors. A variety of explanations may be proposed for this state of affairs. Students who may be enrolled in a single art course to satisfy the requirements of another major may indeed be less interested in developing their

knowledge and skills in the area and more interested in the entertainment value of the course. Enthusiastic teachers who are interested in maintaining rapport with their students are more apt to fulfill this need. An other equally plausible explanation is that students who are not majoring in art are likely to have less experience in the arts and to believe that they lack both skill and the ability to develop it. They might, then, approach art courses with a considerable amount of trepidation. Supportive, enthusiastic faculty persons, who point out what the student is doing well rather than errors of which he is already acutely aware, allay this fear. The faculty person who appears to be light years ahead of the student and who has difficulty coming down to the student's level may serve to increase the student's anxiety even though he actually passes on more information. Whatever the true reason for the difference in emphasis between the non-majors and the more experienced students and faculty, this finding may have some implications for the organization of the lower level courses.

Although most studies of evaluation policies of students conducted so far have found little difference in evaluation schemes between majors, this study suggests that some may exist between academic and non-academic areas. Communication skills have been found by many studies to have major importance in judgments of quality in teaching (Wittrock and Lumsdaine, 1977). This cue did not seem to have overwhelming importance for

subjects in this study and for Groups I, III, and IV could be separated out as part of a subset of lesser importance. A possible reason for this lack of emphasis on communication may be found in the peculiar structure of studio instruction which involves very little in the way of lecture and considerably more in individual interchange between student and teacher. These conditions, coupled with an approach that generally favors the self-discovery of principles by the student, may decrease the actual importance of lecture skills in transmitting information. A lesser reliance upon this capacity in making a judgment of teaching ability might logically result from this situation. Gaines (1975) has made a similar suggestion that specific majors require different skills on the part of both student and teacher.

A second area where students in the arts seem to differ from the general pattern of evaluative criteria that has been indicated by other studies is that of directiveness and organization. Previous work has found that most students prefer instructors who are directive in their approach to teaching. Such an instructor has been described as being specific in his demands, as establishing a reasonable set of criteria, and as not deviating from his original scheme rather than allowing the student more autonomy. In this study both faculty and students weighted the cue in a slightly negative fashion but actually used it very little in their judgments.

Although this finding, if accurate, is surprising in view of

the importance given this cue in other studies, when seen from the requirements of art production it is not. The artist and art student must often be thrown back on his or her own resources. This characteristic is at the very heart of artistic endeavor since, to be of worth as art, the art product must be one's own individual expression. Emphasis on direction from outside one's self might then be seen as dramatically opposed to the development of this ability. The question of whether the individuals involved in the study adequately interpreted this cue remains unanswered, however.

In light of the above comments, it is interesting that creativity received so little weight in the judgment policies of subjects. One would expect, based on previous personality research (Dellas and Gaier, 1970; Barron, 1972; McKinnon, 1962; Holtzman, Schwartz, and Thorpe, 1971), that this factor would be viewed quite favorably by both art students and faculty. In fact, however, cue weightings in regard to creativity were in a slightly negative direction for all groups. The treatment of the cue by the subjects is difficult to explain, particularly because other studies have indicated that art students favor creative and novel approaches. Again, a possible explanation is that the meaning of the cue was obscure.

The appearance of differences between the policies of art students and those found in other studies seems to underscore the necessity of considering the special characteristics of the subject

matter, students, and the conditions of the teaching situation in evaluating teaching. Teaching may not be the general skill that it is often assumed to be. The concomitants of good teaching may vary with the idiosyncratic nature of the course and necessitate consideration of the particular context. In cases where normative comparisons might be made, it may be appropriate to consider these factors.

The expectation that there would be differences between faculty and students in regard to the value of participation in the art world via exhibiting their own creative productions was largely not upheld. Because this factor could be roughly equivalent to publishing in other disciplines, it could be supposed that faculty would respond more positively to teachers who were also heavy exhibitors. In the case of students, this activity may be seen to have less clear relevance to classroom activities. Because of the halo effect of an individual's reputation on current evaluation, it might be alternately proposed to have the opposite effect. In actuality the weights of this cue approached zero with lower division students being slightly more negative toward the cue and faculty and BFA students being on the positive side. Although the lack of emphasis on exhibiting is not particularly contradictory in regard to students, the attitude on the part of faculty is somewhat difficult to explain. Perhaps, however, an explanation may be found in the manner in which the faculty divided themselves on this cue, some weighting it heavily in the

positive direction and some not. This cannot be seen to imply anything about faculty members' actual behavior in terms of creative production but may only be seen as an indication of their attitudes toward the relationship of exhibition involvement to teaching skills. The finding is also consistent with a group of studies which find little difference between students and faculty in regard to the importance they place on activities outside the classroom when they evaluate instruction.

Perhaps the most interesting finding, at least in relation to what may or may not be concluded from any rating form, is that none of the groups are particularly successful in stating their judgment policies. Those who are extremely successful are cancelled out by those who are extremely unsuccessful. While it has been postulated by some theorists that creative individuals have greater access to their subconscious processes than other persons, the theory seems, at least in regard to this task, invalid. Art students and faculty are often erroneous in stating their policies, achieving on the average only low moderate correlations between empirical and subjective policies. This conclusion is consistent with the results of a multitude of social judgment studies in a wide variety of areas (Hoffman, 1960; Shepard, 1964; Goldberg, 1968; Slovic, 1969; and Nisbett, 1977). The obvious implication is that one must, when looking at evaluations, realize that there may be large differences between what the student says he values and his rating scheme. Forms based on

subjective statements are likely to have only face validity.

A final comment is that good teaching, in art as well as in other disciplines, may not necessarily be correlated with the happiness of the student. Although it is ideal for students to be satisfied with their education, it may be argued that the primary concern should be with the actual knowledge that is transmitted during the educational process. Although student feedback may aid the instructor in improving his approach to teaching so that the transmission of material from student to teacher is facilitated, it is not always clear that the student's wishes should be the most important ones. While students may have a fair idea of what they want at the present time, these desires may not have a relationship to what they will need in the future or to their continuing interest in the subject matter.

Implications

Evaluation in higher education has been a continuing problem. On the one hand administrative officials insist that some basis is required for the awarding of tenure and promotion. On the other is the difficulty of finding a procedure which is functional and equally acceptable to all the groups involved. A number of models have been proposed, one of which is based on student opinion. This section presents the implications of this study on a consumer model of teacher evaluation.

1. Although a major argument against student ratings in all university areas is that students focus on irrelevant aspects of teaching, it does not appear that students differ greatly from faculty in their weighting of teaching behaviors. It seems, therefore, that student evaluations may serve as an adjunct to other evaluation processes. Their most vital role in this regard may be to help faculty assess their strengths and weaknesses.
2. Although many studies have found no differences between majors in what students feel is important in their instructor, this study suggests that such differences may exist. Some method of varying ratings between the major curricular areas could aid in collecting appropriate data.
3. The variation in ordering of cues suggests that needs of students may vary between various levels of a discipline. Since faculty may be oriented toward satisfying differing needs, it is possible that some personnel may be more effective at one level than another. Both the needs of the student and the strengths of the particular faculty member may need to be taken into account in assigning faculty.
4. Subjective statements of preferences may not be a particularly good indicator of real policies.

While this study involved the policies subjects use and believe they use, other approaches might well be employed.

Comparisons of student attainment with appropriate objectives and goals may well be the sine qua non of educational evaluation. While such goals are not easily formulated, unless they are set forth, evaluation of merit may be impossible. Objectives for instruction must necessarily include not only what the student believes today but the attitudes, values, and knowledge he retains over time.

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APPENDICES

Appendix I

Consent Form, Instrument, and
Rating Scale

CONSENT FORM

In signing this consent form I agree to participate in a study conducted by Beverly Browne under the supervision of Dr. John Gillis. My signature indicates that I have read and understand the following five rights.

1. I understand that I do have the right to refuse to participate in this study if I so desire.
2. I understand that I do have the right to terminate my participation in the study if I so desire.
3. I understand that I do have the right to complete information as to the nature and purpose of the study as soon as the information can be feasibly given without affecting the outcome of the study.
4. I understand that I do have the right to not be deceived during my participation unless (a) deception is, within reason, necessary to conduct the study, (b) no harm or psychological stress can logically be anticipated to result from the use of deception, and (c) I have been fore-warned of the possibility of deception before my participation.
5. I understand that I do have the right to keep my identity anonymous if the study should be publically reported.

My signature below indicates that I have read, understand, and have received a copy of these five rights.

Signature _____

Date _____

ART INSTRUCTION JUDGMENT SURVEY

Faculty

MFA/BFA

Undergraduate Art Major

Other. Please specify. _____

Instructions: Please read before beginning.

The following paragraphs describe a series of hypothetical art instructors. After reading each description, rate the instructor's effectiveness by circling a number on the scale provided. A score of 1 means that the teacher provides a low quality of instruction. A score of 20 means that the teacher's quality of instruction is high.

You will find that the descriptions contain a number of adjectives that indicate how often the instructors behave in certain ways. They are:

Adjective	Frequency of Behavior
never/almost never	0 - 20%
occasionally/sometimes	20 - 40%
generally	40 - 60%
frequently/often	60 - 80%
always/almost always	80 - 90%

You may find the adjectives helpful in determining how effectively the instructor performs his task.

This is an opinion survey. THERE ARE NO RIGHT ANSWERS!

Please begin.

1. Teacher (1) is generally supportive in interactions with students. He is frequently organized and directive and is always enthusiastic. He is always able to explain concepts clearly, frequently indicates a strong knowledge of art, and frequently exhibits his own work. He is almost never creative in his approach to teaching.
2. Teacher (2) is a frequent exhibitor. He occasionally seems to be knowledgeable about art but never communicates concepts well. Although he sometimes presents novel and interesting projects, he is almost never enthusiastic about teaching. He frequently sets specific requirements for his classes. he is only occasionally supportive of his students.
3. Teacher (3) is always creative in teaching and is frequently enthusiastic and energetic. He always seems to know the subject and generally communicates well. He always directs student work by specifying goals and requirements. He is occasionally friendly and supportive toward students. He never exhibits his own work.
4. Teacher (4) is always supportive and always encourages student independence by being non-directive. Although he frequently approaches teaching creatively, he is only sometimes enthusiastic in the classroom. He generally communicates well and frequently seems to have a strong knowledge of the subject. He never participates in exhibitions.
5. Although teacher (5) generally approaches teaching in a directive fashion, he never presents unusual concepts, ideas, or projects. He is always enthusiastic, however, and always appears highly knowledgeable. His communication skills are frequently effective. He is occasionally supportive and friendly and occasionally exhibits his own work.
6. Teacher (6) is generally supportive and friendly. Although he sometimes is directive, he often allows student independence. He is always enthusiastic and frequently uses creative ideas in teaching. He frequently exhibits a highly developed knowledge of art and is generally involved in exhibiting. He always has difficulty communicating concepts, however.
7. Teacher (7) always appears knowledgeable and frequently communicates clearly. He is generally supportive in his relations with students and is sometimes enthusiastic about the subject. He is never particularly creative in teaching and is never directive. He is generally involved in exhibiting.

8. Teacher (8) is frequently supportive. He always assigns specific problems and directs student work. He generally seems knowledgeable and generally exhibits his own work. He never explains concepts clearly in the classroom and is never enthusiastic or creative in his teaching style.
9. Teacher (9) is sometimes supportive and never directive. He is sometimes enthusiastic and energetic in his teaching style and is generally creative. He frequently communicates effectively and always is knowledgeable. He occasionally exhibits.
10. Teacher (10) is almost never supportive or friendly in the classroom although he is always highly knowledgeable. He is always organized and directive in teaching and is frequently enthusiastic. He is generally able to communicate well and is generally creative. He sometimes exhibits his own work.
11. Teacher (11) is always supportive and friendly toward students. He always communicates effectively. He occasionally guides and directs. Although his teaching is generally creative and enthusiastic, he is only sometimes knowledgeable. He never participates in the art world by exhibiting his own work.
12. Although teacher (12) is always involved in exhibiting his work and has a reputation as an artist who has a great understanding of art, he is never supportive or enthusiastic while teaching. He never attempts to direct or guide student work although he can frequently communicate well. He frequently offers unusual ideas and creative concepts.
13. While teacher (13) never shows his own work, he is always very supportive of his students. He always offers a high degree of direction. Although he is generally enthusiastic when teaching and can generally communicate well, he is only occasionally creative. He sometimes indicates a knowledge of art principles and techniques.
14. Teacher (14) frequently indicates a high degree of knowledge of art and always communicates effectively. He frequently exhibits. Although his teaching style is not exuberant, he frequently offers helpful suggestions and is frequently supportive. He frequently assigns specific projects but they are often routine rather than creative.

15. Teacher (15) never dictates class work or offers to provide direction. He is always friendly and interactive with students, always provides clear and explicit explanations, and is always knowledgeable in his area. He is generally enthusiastic and generally approaches teaching creatively. He sometimes exhibits his work.
16. Teacher (16) is frequently supportive and approachable with students. He frequently shows that he has a thorough understanding of art but only sometimes communicates well verbally. He frequently provides direction and specifies requirements. His assignments are occasionally interesting and creative. He is generally enthusiastic and is a frequent exhibitor.
17. Teacher (17) generally specifies class activities but his assignments are only sometimes novel or creative. He is generally enthusiastic in the classroom and is frequently supportive toward his students. He frequently displays a knowledge of the subject and an ability to explain assignments and concepts. He generally participates in exhibitions.
18. Teacher (18) almost never communicates well verbally but he often shows understanding of art principles and techniques by frequently presenting creative assignments and generally exhibiting his own work. He almost never is supportive and may be critical of students. His approach to teaching is frequently structured and directive. He almost never expresses an avid interest in teaching.
19. Teacher (19) is always directive and well organized in his teaching. He discusses art with enthusiasm and generally communicates well. Although his assignments are creative, he never seems to have a deep knowledge of the subject matter. He is generally friendly and supportive and sometimes exhibits his work.
20. Teacher (20) is always highly knowledgeable about art and creative in his approach to teaching. He generally explains concepts and principles well and frequently discusses the subject enthusiastically. He is sometimes directive but more often encourages student independence. Although he is generally supportive in his relations with students, he is almost always more concerned with exhibiting his work.

21. Teacher (21) always appears to be enthusiastic and interested in art and teaching. While he always specifies what work is to be done, he is always supportive and focuses on good points in criticism of student work. Although his assignments are never novel or creative, he generally communicates well and is generally knowledgeable. He occasionally participates in exhibitions.
22. Teacher (22) is always highly directive. He generally gives creative assignments but only occasionally is able to explain them clearly. Although he generally exhibits his work, he only sometimes seems knowledgeable in the classroom. He is occasionally supportive in his relationships with students.
23. Teacher (23) never exhibits his work, never seems particularly knowledgeable in the classroom, and never communicates concepts adequately. He sometimes assigns specific problems which are frequently creative and sometimes offers guidance on their completion. He is generally enthusiastic and sometimes friendly and approachable with students.
24. Teacher (24) is frequently involved in the arts outside of teaching through exhibiting his work and frequently shows a deep understanding of art in the classroom. He is always supportive and able to communicate his knowledge to his students. He is occasionally enthusiastic about teaching but is not likely to devise creative approaches to it. He is sometimes directive.
25. Teacher (25) is frequently supportive and directive. He never communicates effectively although he frequently makes creative assignments and is often enthusiastic about the subject and about teaching. He sometimes appears knowledgeable and generally exhibits his work.
26. Teacher (26) frequently provides a high degree of guidance and structure in his course. He is always supportive in his interactions with students, is always enthusiastic in discussing art, and is always involved in exhibitions. Although he frequently seems knowledgeable, he never explains ideas or assignments well and never presents unusual or creative ones.
27. Teacher (27) is always enthusiastic, supportive, and knowledgeable. He frequently is able to discuss art in an interesting and understandable way. He is always highly structured and directive in his approach to teaching but only occasionally presents novel projects and assignments. He sometimes exhibits.

28. Although teacher (28) is always directive and insistent upon students fulfilling specific requirements, he frequently communicates ideas effectively and is often enthusiastic. He is frequently supportive and friendly with his students. He sometimes is knowledgeable although his teaching methods are never creative. He always exhibits.
29. Teacher (29) sometimes exhibits and occasionally seems knowledgeable in the classroom. He generally explains ideas clearly but teaches creatively only occasionally. He is always enthusiastic about art and students frequently find him supportive. He frequently offers guidance to his students and his classes are often highly structured.
30. Although teacher (30) is frequently an interesting speaker and is generally supportive and friendly in his relationships with students, he has no area where he is particularly knowledgeable. He will generally provide specific assignments and guidelines for students. Generally he tries to make his teaching creative. Sometimes he is enthusiastic about art and occasionally exhibits his own work.
31. While teacher (31) is always knowledgeable about art and is always an excellent speaker, he never exhibits his own work. He is never directive in his teaching and allows a great deal of student independence. He is generally enthusiastic about art and his teaching style is frequently creative. Although he is sometimes supportive and interactive with students, he is more often aloof.
32. Teacher (32) always speaks well and explains clearly. He is frequently enthusiastic and creative when presenting material. He is generally knowledgeable about art and sometimes exhibits his own work. He is never particularly supportive but often encourages student autonomy in forming and completing projects.
33. Teacher (33) is never supportive and tends to be critical. He frequently exercises tight control over class requirements. His teaching is generally creative and sometimes enthusiastic but he never displays personal creativity by exhibiting his work. He is always an excellent speaker. An analysis of his presentations reveals, however, that he only occasionally shows a thorough understanding of art.
34. Teacher (34) always participates in exhibitions although he never seems knowledgeable in the classroom. He frequently communicates clearly but is never very enthusiastic about teaching or art. He is generally supportive of students. He always assigns specific problems but the assignments are only sometimes creative.

35. Teacher (35) never gives an impression of great knowledge although his exhibition record is average. He is frequently considered to be a good speaker. His teaching is generally directive while allowing some independence on the part of the students. He is frequently supportive and focuses on successful aspects of student work in criticism. His class presentations are sometimes energetic and creative.

How important do you think the following characteristics are in determining teaching effectiveness in the arts?
Please divide 100 points between them.

- | | |
|--|-------|
| 1. Supportiveness | _____ |
| 2. Directiveness, organization | _____ |
| 3. Enthusiasm | _____ |
| 4. Teaching creativity | _____ |
| 5. Ability to communicate | _____ |
| 6. Knowledge of the subject | _____ |
| 7. Personal creativity and
exhibition involvement | _____ |

Appendix II
Sampling Matrix

Groups

P	Groups			
	I Non-Art	II Art Maj.	III Grad/BFA	IV Faculty
1-35	20	20	15	12

n = 67