

AN ABSTRACT OF THE THESIS OF

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Title: Using Evaluative Results in Program Improvement by Public Vocational High School Instructors in Taiwan

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The purpose of this study was to explore factors which influence Taiwanese vocational teachers' participation in program evaluations, use of evaluative results and, in turn, program improvement. Twelve Taiwanese public vocational high school teachers were interviewed during February and March 1992. To confirm the responses of the teachers, 12 school administrators and ten external evaluators were also interviewed.

The literature indicates that teachers' participation in evaluation may be influenced by their self-esteem, perceived qualification of evaluators, the quality of the evaluation methods, and their subculture. These concepts are applicable but from a somewhat different perspective in Taiwan. Teachers do not seem to feel that they are active participants in evaluations and that evaluations may have little consequence to what they do. Current

evaluation practices and purposes appear to be quite different than those described in official documents. These differences seem to be inevitable because of the cultural determinants of "saving face," "reciprocal obligation," and maintaining "social harmony." Evaluations appear ritualistic and ineffective as means to engage teachers in improving the quality of vocational evaluation on a systematic and sustained basis.

Based on the findings, it was proposed that alternative evaluation methodologies should be employed. For short-term improvement, the evaluations should begin with teachers. Teachers need materials, help from experienced and expert teachers, training, and time to fulfill their evaluation responsibilities. Teachers would collect and analyze information and then use it to improve their instruction. Selected information would then be passed up to administrators and ultimately to the Ministry of Education. For long-term improvement, the principles and techniques of Total Quality Management should be applied to assure the quality of vocational education programs in Taiwan.

Using Evaluative Results in Program Improvement by Public
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Using Evaluative Results in Program Improvement by Public Vocational High School Instructors in Taiwan

I. INTRODUCTION

Problem

The major goal of vocational education in Taiwan is to provide sufficient human resources for all levels of industry, both in the necessary quantity and comprehensive quality (Hsia, 1981). During the past four decades, Taiwan has been in transition; the country is shifting from labor-intensive to capital- and technological-intensive industries in which technological workers of higher quality are urgently needed. Thus, a comprehensive system of vocational education has been developed to play an increasingly important role in Taiwan's economic development (Chang, 1986).

Starting in 1976, evaluations were conducted on the industrial programs in vocational high schools in Taiwan. A review of five evaluation reports (Education Department of Taiwan Province, 1983; 1984a; 1984b; 1990; Republic of China [ROC], 1990b) and one evaluation handbook

(Education Department of Taiwan Province, 1989) indicates that school administrators for a school should first conduct a self-evaluation of their programs. A team of external evaluators then conducts an on-site evaluation of the institution. Each three-to-nine-member team consists of experts from industry, administrators from provincial and national education departments and university faculty. Team members are given copies of the school's self study; then the team meets formally prior to conducting its on-site evaluation. During the on-site evaluation, the external evaluators visit classrooms and workshops where teaching is performed. Equipment and facilities are inspected, and related records and information are reviewed. Team members meet with both students and teachers. Direct evaluations of teachers' performances are not a part of this program evaluation since all teachers are evaluated annually by their school administrators. Toward the end of the evaluation process, the external evaluation team conducts a comprehensive meeting with institutional administrators, teachers, and related personnel to provide a summary of their findings and to receive feedback or additional information.

Program evaluations can serve as a vehicle for change (Armstrong, 1985). According to Madaus,

Stufflebeam, and Scriven (1983), a purpose of evaluation is to provide information for the improvement of learning, teaching, and administration. Huang (1989) stated that in Taiwan the extent to which evaluation is a force in program improvement ultimately relies upon the willing participation of the teaching staff. He summarized the factors which influence evaluation utilization by decision makers; however, these factors were derived from research completed in the United States.

Research on the use of evaluation results by teachers has generally focused upon three areas: (1) teacher characteristics and culture (e.g., Komp, 1988; Shujaa, 1989), (2) administrative characteristics (e.g., Armstrong, 1985; Corbett, Firestone, & Rossman, 1987), and (3) evaluation methodology, including the perceived competence of evaluators (e.g., Paulin, 1980; Suchman, 1967). Most studies addressed only a single independent variable or, at best, relationships among only a few variables. Because they had limited scopes, none of the studies provided a sufficient or comprehensive explanation of the factors that influenced teachers to use evaluative data in program improvement in the United States. Only rarely did studies investigate cultural influences on evaluation methodology. Specifically,

little is known about Taiwanese vocational teachers' views on program evaluation and variables which may encourage them to fully use the results of evaluations in program improvement. Therefore, the proposed study was initially based upon the question: What are the factors which may encourage Taiwanese vocational teachers to use evaluative results? Understanding these factors could lead to appropriate advances in Taiwanese teachers' participation in program evaluations and in their use of evaluative results to improve vocational education programs. The provision of this type of information may also contribute to the delineation of future research on teacher participation in evaluations conducted in the United States.

Vocational programs in Taiwan are conducted at both high school and community college levels, and they are offered in both public and private schools. Because there are differences in personnel systems between the two levels and between public and private schools, it would be reasonable to expect that teachers at each level and in each type of school may respond differently to the issues of program evaluation. Public school teachers enjoy benefits from the government, such as health insurance, and feel that they have a high degree of job security. On the other hand, private school teachers

usually receive fewer benefits and, therefore, may view program evaluations as threatening to their job security. The teachers in public community colleges have the same benefits and job security as public high school teachers; however, their average education background is higher than the high school teachers (ROC, 1988). This study, therefore, focused only on the public high school teachers who are a relatively homogeneous group.

Review of Related Literature

Vocational Education in Taiwan

In Taiwan, the Ministry of Education is charged with the ultimate curricular responsibility in setting program standards for schools at all levels (Huang, 1989). Under the Ministry of Education, there are three regional education departments: Kaohsiung City, Taipei City, and Taiwan Province. The Taiwan Province department covers Kaohsiung County, which surrounds but excludes Kaohsiung City, Taipei County, which surrounds but excludes Taipei City, and all other areas on Taiwan (Republic of China [ROC], Ministry of Education, 1988).

Vocational Education

Vocational high schools and technical colleges in Taiwan are administratively in different "tracks" than academic institutions. There are six principal types of vocational schools in Taiwan: industry, agriculture, commerce, marine products, medical service and nursing, and home economics. To support industrial development in Taiwan, the majority of vocational schools offer industrial-related programs (Education Department of Taiwan Province, 1991; ROC, 1990a).

To improve vocational education for industrial development, the Ministry of Education implemented three consecutive phases of a "vocational industrial education curriculum reform program"; these phases spanned 1979 to 1981, 1982 to 1985, and 1986 to 1990 (ROC, 1990b). During the first phase of the reform program, industrial-related programs were strengthened in various ways. The government established new vocational industrial high schools, added industrial programs to vocational commercial or agricultural high schools, and replaced facilities and equipment in the original industrial schools. Furthermore, in 1986, vocational programs were classified into styles A and B. Style A programs address clusters of occupations and emphasize interdisciplinary teaching. Style B programs maintain the traditional

unit-trade focus (ROC, 1990b; Education Department of Taiwan Province, 1990).

Vocational Program Evaluation

To gauge the effectiveness of vocational education, the Education Department of Taiwan Province started in 1976 to conduct a series of evaluations of industrial programs in both public and private vocational high schools under its jurisdiction. The evaluation reports indicated that the evaluations during the 1970s focused on improving equipment (Education Department of Taiwan Province, 1983, 1984a). In 1981, the Education Department aimed evaluations at vocational programs in the mechanical group. In 1982, electrical and electronic group programs were evaluated. Other industrial programs were evaluated in the following years. The principal purposes of these evaluations were as follows (Education Department of Taiwan Province, 1984a):

- (1) To explore the effectiveness of teaching and administration;
- (2) To analyze the improvements achieved since prior evaluations in 1976 and 1977; and
- (3) To supervise and facilitate the improvement of programs, teachers' educational background, equipment, and administration.

An additional purpose was added to the program evaluations of the industrial vocational group:

- (4) To measure the effectiveness of and to describe problems in conducting the "[v]ocational industrial education curriculum reform program" (Education Department of Taiwan Province, 1983, p. 2).

After the style A programs were implemented in 1986, the government took further steps to promote interdisciplinary teaching programs and to otherwise effectively utilize teaching resources, including school equipment. Thus, the Education Department of Taiwan Province evaluated style A programs in 1989. The stated purposes of these evaluations included the first and third purposes of the 1984 evaluation and added three intents (Education Department of Taiwan Province, 1989, 1990):

- (1) To explore the effectiveness of teaching and administration;
- (2) To supervise and facilitate the improvement of programs, teachers' educational background, equipment, and administration;
- (3) To assist each school with program planning and evaluation;

- (4) To motivate schools toward growth by the conduct of self-review processes; and
- (5) To guide and facilitate the improvement of deficiencies in each school.

In 1990, after the third phase of the "vocational industrial education curriculum reform program" was implemented, the Ministry of Education conducted a nation-wide evaluation of all programs. The evaluation involved the vocational high schools which were supported by the reform programs in Kaohsiung City, Taipei City, and Taiwan Province. The major purpose of this evaluation was to provide information for "decision-making" in the improvement of technical and vocational education program (ROC, 1990b).

For Taiwan Province, the 1981 evaluation was based upon the Stake (1973) evaluation model. The design included the collection of "antecedent, transaction, and outcome" data within "description and judgment matrices" (Education Department of Taiwan Province, 1983). In practice, however, evaluation focused on the more material and procedural aspects of the programs; it did not address student outcomes (antecedents) and instructors. The evaluations conducted in 1989 and 1990 applied concepts in the Stufflebeam CIPP model, including context, input, process, and product evaluations

(Education Department of Taiwan Province, 1989; 1990; ROC, 1990b). The deficiency in implementation noted for Stake's model was the same for the CIPP model. Regardless, the evaluation procedures employed in Taiwan were generally in accordance with the concept of the "professional judgment" approach (Floden, 1983; Worthen & Sanders, 1987). The advantages of using the professional judgment approach, which places emphasis on the experience and proficiency of experts, are the ease of conducting the evaluations and the immediate availability of results. The shortcomings of this approach are its questionable objectivity, credibility, and "replicability" (Huang, 1987; Scriven, 1973; Worthen & Sanders, 1987). These shortcomings may be caused by other factors including: evaluation teams that are not qualified to evaluate; provision of ambiguous guidelines or criteria; and too much attention paid to physical considerations in schools (Floden, 1983; Stake, 1973).

Teacher Characteristics

The teacher characteristics which will be discussed are: (1) self-concept (e.g., Komp, 1988; Suchman, 1967), (2) psychological characteristics (e.g., Armstrong, 1985; Carter, 1973), and (3) teachers' subculture (e.g., Shujaa, 1989; Wolf, 1973). Self-concept is one component

of psychological characteristics; however, it is considered separately because of its potential importance to teachers' use of evaluative results in program improvement. Teacher subcultures, which consist of teachers' attitudes, beliefs, and values in an institution, will also be discussed.

Self-Concept

"Self-concept" was defined by Rogers (1951) as "an organized configuration of perceptions of the self which are admissible to awareness" (p. 55). Perceptions include personal characteristics, abilities, and values. Self-concept can be a major and measurable component of personality and appears to be related to other elements of personality, including motives, needs, and attitudes. Self-concept may be a predictor of how one person behaves or responds to stimuli (Roger, 1951; Wells & Marwell, 1976). For example, low self-concept persons would be expected to negatively anticipate the responses from and respond to others (Komp, 1988).

There has been considerable speculation about the relationship between self-concept and the use of evaluative data. Program evaluation may cause feelings of fear and threat in teachers (Armstrong, 1985; Komp, 1988; Nutt, 1981). These feelings can lead individuals

to either avoid evaluations or conduct "pseudoevaluations" which arrive at findings of questionable validity, but reasonable appearance, when conducting the evaluations is inevitable (Nutt, 1981). Poor results of evaluations could embarrass low self-concept teachers; therefore, such individuals might manipulate the information presented to evaluators. The loss of social status because of poor results may threaten teachers' acceptance of evaluations (Armstrong, 1985; Campbell, 1976; Davis & Salasin, 1983; Komp, 1988; Suchman, 1967). Diminished job satisfaction because of the negative feedback from evaluations may also turn teachers against evaluations (Davis & Salasin, 1983). Furthermore, decreased personal convenience because of changes that may result from evaluations may encourage teachers to resist evaluations (Armstrong, 1985; Davis & Salasin, 1983; Hunter & Russell, 1990).

Administrators may resist program evaluations if the results could be perceived as potential threats to their self-concept or their prestige (Armstrong, 1985). They may also resist evaluations if the findings appear to weaken the power of their institutions. When the results of evaluations indicate that there are deficiencies between goals and actual performances, the evaluations could serve to destabilize the environments of the

administrators. In these situations, negative findings may be treated as meaningless, or they may be accepted to the extent that they are perceived by the administrators to be useful (Carter, 1973).

The only study that focused on the relationship between teachers' self-concepts and teachers' resistance to evaluations was conducted by Komp (1988) at the University of California at Santa Barbara. The study used "self-esteem" as the estimation of "self-concept." Data were collected from teachers in the Ventura Unified School District which is adjacent to the University of California at Santa Barbara. The sample consisted of 72 teachers (representing a 67 percent response rate) from four junior high schools. The instrument used to collect data employed the semantic differential scaling technique and had 12 concepts. Each scale was evaluated with seven sets of bipolar words. A combination of parametric and non-parametric statistical tests was used to analyze the data.

Komp (1988) concluded that "high self-concept" teachers were more willing to participate in evaluations and to use evaluative results. The related variables included in the conceptual framework provided in Figure 1 are based on the characteristics of self-concept as summarized by Komp (1988). However, Komp's study was

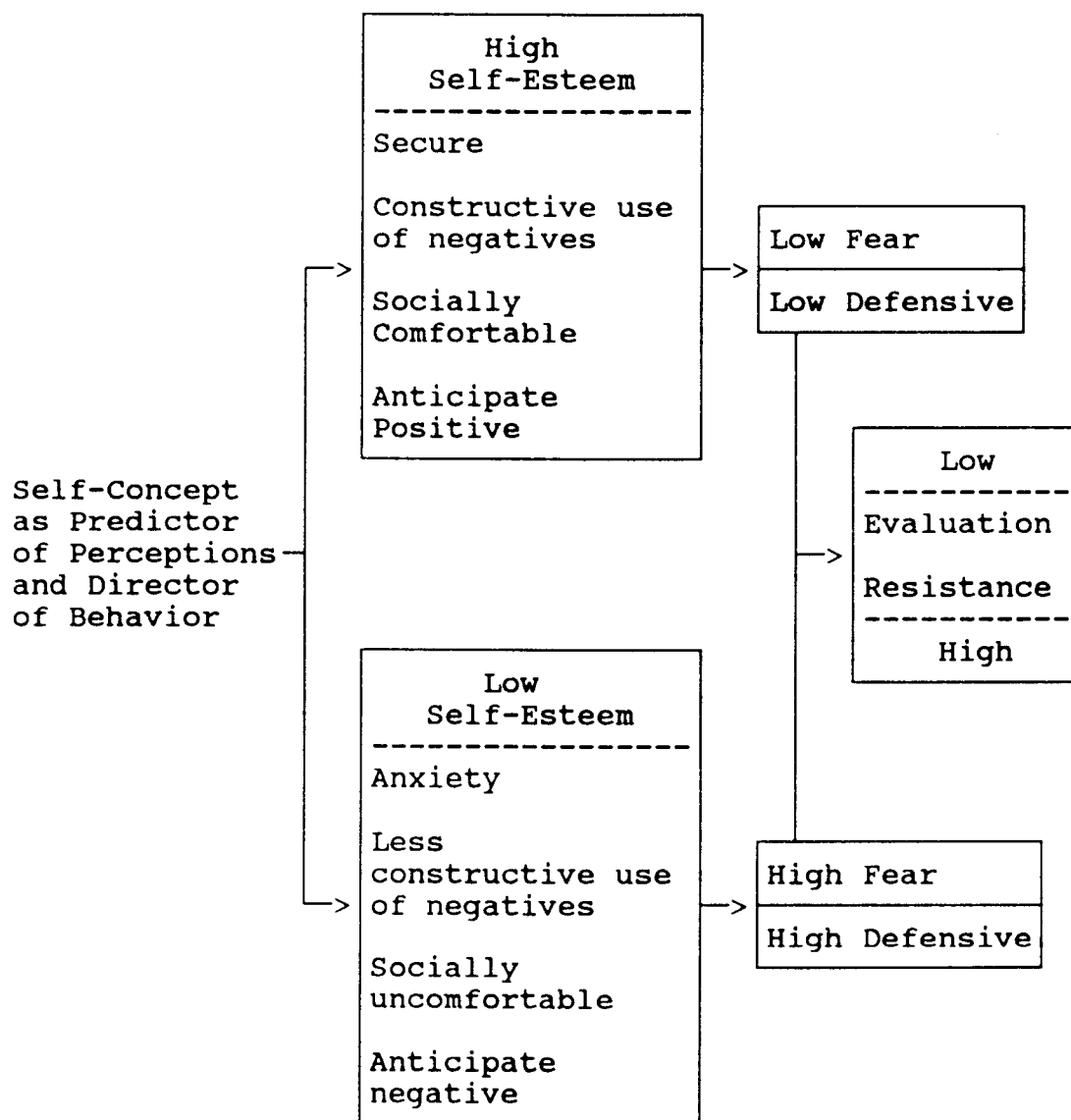


Figure 1. Conceptual Framework Schema of the Influence of Self-Concept Upon Resistance to Evaluation (Komp, 1988, p. 94).

limited in scope to concern for the relationship between self-concept and teacher resistance to evaluations.

Because the accounted for variance was relatively low ($r = .50$, $ndf = 71$, $p < .05$), Komp concluded that

"personality characteristics, not just self-concept, [influence] the degree of. . .acceptance and resistance" to program evaluations (p. 147). She summarized the characteristics of an individual with a high self-concept personality as:

- anticipates positive responses from others;
- is more likely to use negative experiences in a constructive manner;
- responds favorably to any kind of feedback from others;
- is more secure--more comfortable in close social interactions;
- shows less discomfort in situations of imbalance;
- is better able to handle stress; shows less anxiety. (p. 87)

This type of individual is more optimistic with regard to the future and more willing to try new things than the low self-concept individual. Komp concluded that when faced with the future, the high self-concept person needs little protection and few guarantees in new working environments which result from change.

On the other hand, Komp (1988) concluded that persons with personalities which reflect poor self-concepts require assurances about their future; they worry that evaluations may cause changes to their perceived future. Persons who are fearful spend a great deal of their time

defending themselves from attacks and threats; whereas self-confident individuals are able to devote more of their energy to their work (Bulach, 1985). The step between worrying about evaluations and resisting evaluations is then quite small. Therefore, Komp recommended that when administrators conducted evaluations and program planning procedures, the influence of the self-concepts of participating individuals should be considered.

Self-concept of Chinese Teachers

The self-concepts of Chinese are relatively poor, compared to American self-concepts (McDaniel & Soong, 1981; Tien-Hyatt, 1987). Applying Komp's (1988) premise, Chinese teachers may perceive evaluations more negatively than would American teachers because of their relatively low self-concept. Negative findings may lead to "loss of face," thus injuring the self-esteem of the concerned individuals (Hwang, 1987) or bearing harm to their social status. In this sense, "face" is related to self-concept. The concern for "loss of face" may be a large barrier for Chinese teachers in Taiwan when faced with evaluative results.

Latourette (1964) described "face" as an important principle of social relationships in Chinese society. Hu

(1960) interpreted "face" as "one's accumulated moral and social prestige" (p. 493) in the views of others. Ho (1976) further differentiated the concept of "face" and "prestige." He indicated that the problem of "face" occurred only when individuals were involved in social interactions with others. On the other hand, "prestige" was closely related to the individual's personal characteristics, including competence and expertise. Ho defined "face" in complex conceptual terms:

Face is the respectability and/or deference which a person can claim for himself [sic] from others, by virtue of the relative position he [sic] occupies in his [sic] social network. . . .The face extended to a person by others is a function of the degree of congruence between judgments of his [sic] total condition in life. . .and the social expectations that others have placed upon him [sic]. (p. 883)

Even today, "saving face" is an important consideration observed within Chinese society. From this perspective, Chinese teachers' self-concepts could be an important influence upon attitudes toward program evaluations, particularly when negative results are a possibility. However, self-concept may be too broad a construct when considering "face"; use of self-esteem may actually be a more appropriate factor to consider when studying Chinese teachers' attitudes toward evaluation.

Psychological Characteristics

Komp (1988) suggested that teachers' psychological characteristics should be included in investigations of responses to change and evaluations; however, the personality variables which may be the most influential were not identified by her. One possible area of consideration may be those personality variables related to teacher responses to change. Armstrong (1985) hypothesized that there would be different degrees of acceptance of change and evaluation by teachers. He indicated five classes of respondents: "innovators" who are "venturesome," "early adopters" who are "courteous," the "early majority" who are "deliberate," the "later majority" who are "suspicious," and "laggards" who are "traditional." Among these classes, he speculated that "early adopters," as an example, "tended to be more modern, better educated, have greater rationality and a more favorable attitude toward change and risk" (p. 7).

Traditional Chinese personality traits may include good manners, hospitality, moderation, harmony of reasoning and feeling, peacefulness of mind, and concern for the well-being of friends (Hu, 1960; Loridas, 1988; McDaniel & Soong, 1981). Chinese teachers may respond positively to evaluations because of their need to keep the workplace peaceful and harmonious. On the other

hand, Chinese teachers may tend to respond to evaluation and change slowly, as would the late majority or laggard classes, because of their desire to preserve the standard of moderation. Chinese teachers, for reason of their concern for the well-being of others, could respond negatively to evaluation and change if the results were perceived as harmful to their friends or colleagues.

The desire for autonomy may be another element of teachers' personalities which may influence attitudes toward evaluation and the use of evaluative results. Teacher autonomy is the freedom to manage their teaching activities by exercising their own personal judgments. It has been a professional tradition that these judgments should be arrived at without interruption by persons, rules, or regulations from outside the teaching profession (Paulin, 1980).

Paulin (1980) examined the influence of teacher autonomy upon resistance to teacher evaluation in a California secondary school district composed of four junior high and four senior high schools. This district was the same as the one in which Komp (1988) conducted her study. The conveniently accessible sample consisted of 212 teachers at a relatively low 40 percent response rate. An original instrument was developed which included 59 items in five sections. A five-point rating

scale was used to estimate the influence of teacher autonomy on attitudes toward teacher evaluation. Part of the instrument, which measured the levels of trust shown toward evaluators, was modified because the validity was found questionable after the study had been conducted in three schools. The modified version was not re-administrated to the first three schools. Therefore, the possible defect of the instrument is that, "it cannot be known how the earlier group would have answered the middle section that was changed" (p. 31); however, the responses of two groups were comparable on the parts of the instrument that were not revised. Paulin concluded that the more autonomy teachers felt they had, the more freedom they felt they had in teaching; likewise, the less autonomy teachers perceived they had, the more they felt constrained in teaching. She claimed that teachers tended to respond positively toward teachers evaluations to the degree they felt they were in control of their teaching activities. In other words, resistance to teachers evaluations could be decreased in proportion to increases in teachers' perceived autonomy.

On the other hand, Bland (1990) indicated that teacher autonomy did not seem to be related to the effectiveness of the "Public-Private Partnership" program in the District of Columbia. Her conclusion was based on

interviews with three coordinators during an evaluation of a program designed to prepare high school students for the "world of work."

Confucian thought may influence Chinese attitudes toward autonomy. Chinese educators seem to enjoy a relatively high status in their culture. Authority is given to parents and senior persons (Wen & Hsiao, 1990); however, teachers are regarded as symbols of authority not only by students but also by the students' parents. The Chinese appear to value the academic contributions of the schools because education is regarded as a bridge to wealth and reputation. Therefore, education is important to the Chinese since wealth and social status is a societal measure of success. Because of their important role in the provision of education and from their perception as authorities by students as well as the students' parents, Chinese teachers may enjoy high levels of autonomy within their classrooms (Loridas, 1988). From this point of view, it may be hypothesized that Chinese teachers will accept evaluations only to the extent that evaluative findings do not jeopardize their autonomy, which in this sense includes student and parent perceptions of their authority.

Subcultures

What teachers do and think may include the attitudes, beliefs, and values which make up their culture (Fullan, 1982; Triandis, 1972). The culture of a school depicts the nature of its circumstances, defines the ways that teachers should behave, and conveys the knowledge of what is, as well as what should be, their attitudes, beliefs, and values within the school (Corbett et al., 1987).

Shujaa (1989) investigated teacher responses to educational reform, including the degree to which these responses were a reflection of the influence of subcultures. The data for this study were obtained from interviews with 131 teachers conducted during the 1986-87 school year. The subjects were "purposively sampled" from 48 schools in 19 school districts spread through six states so that findings could be generalized broadly. Shujaa concluded that teachers composed a subculture within schools that would reflect differences in values, attitudes, and behavior on different school settings.

The desire to be accepted in working groups may cause teachers to lean toward the beliefs and attitudes of their environment. Pressures from leaders and viewpoints of peers on evaluation processes are potential influences upon teacher attitudes toward evaluation (Armstrong, 1985). The school's atmosphere regarding faculty

discussions of problems openly and freely may form certain school attitudes toward evaluations (Wolf, 1973).

The Chinese learn to respect their parents and their family traditions at home, and they are taught from the Confucian classics in school (Loridas, 1988). The lack of emphasis upon self-expression encourages the Chinese to "tone down any desire on their part to transcend the group" (p. 94). They are taught to suppress individual roles within the group and the family in order to ensure harmony within each (Hu, 1960; McDaniel & Soong, 1981; Loridas, 1988). In addition, the Chinese seem to be "situation-centered" and tend to be socially or psychologically dependent upon others and more closely tied to their world and to their friends than is perhaps the case in other societies (Hsu, 1981). Yang (1990) expanded the tendency of "situation-centered" into "social orientation." He indicated that because of this tendency Chinese paid attention to external practices and other people's viewpoints; they would suppress their own opinions to agree with the perceived requests of any group in which they held membership. Chinese perceive their roles different in various social groups. In any group, the informal organization is like the hierarchy in a family. In a family, every junior member listens to other seniors, and the oldest one always plays the

"father" role. Every member in a group would feel that they were obligated to others and senior members, especially to the "father." In turn, to criticize junior members of their group is perceived as impolite behavior. The "fear" of making mistakes or breaking rules and thereby bringing punishment down on the group holds society together. Group consensus, therefore, becomes paramount for action to happen. In this sense, the attitude of individual Chinese teachers toward evaluations and the use of evaluative results may therefore be influenced by the attitudes of other teachers in their group within the school, especially the "father" of the group.

Administrative Characteristics

Three administrative characteristics which may influence teachers' attitudes toward the use of evaluative results were identified in the literature: planning, communication, and participation.

Planning

Cautious and adequate planning is one of the most frequently mentioned conditions for effective evaluations and innovations (Corbett, Firestone, & Rossman, 1987; Davis & Salasin, 1983; Fullan, 1982; Nottingham & Dawson,

1987; Rowan, Edelstein, & Leal, 1984; Shujaa, 1989). The availability of funds may serve as an important incentive for effective evaluation planning (Campbell, 1976; Hunter & Russell, 1990). If finances are adequate, planning can consist of detailed and comprehensive procedures to prevent negative reactions from teachers. Furthermore, teachers may be more willing to participate in evaluations if they perceive that sufficient time and resources are provided for them to do so (Armstrong, 1985; Corbett et al., 1987; Davis & Salasin, 1983; Fuhrman, Clune, & Elmore, 1988; Nottingham & Dawson, 1987). With sufficient time and assistance, teachers may be more willing to respond to problems found during evaluations.

Communication

Communications between evaluators and decision-makers may influence the use of the evaluative results (Huang, 1987). If decision-makers understand the evaluation methods the evaluators have used, they may respond more positively to the evaluative results and then accept the evaluators' suggestions. The availability of information about an evaluation may also influence teachers' responses to the process (Armstrong, 1985; Davis & Salasin, 1983; Riecken, 1976). Generally, teachers may

not understand that the results of evaluations could be used to improve existing programs rather than assign blame for shortcomings. Teachers' hostility and resistance may be minimized if they understand the benefits that evaluations can provide to them (Boggs, 1984; Corbett et al., 1987; Wolf, 1973). For example, if teachers do not realize that the purpose of an evaluation is to improve teaching conditions, they may respond negatively to results that indicate deficiencies in their instruction.

Program evaluations may be mistakenly perceived as personal evaluations of teachers or administrators. This misconception may lead to negative attitudes in administrators because "negative" findings degrade their past efforts for the institution (Campbell, 1976). It may be necessary for evaluators to clarify in advance with administrators and teachers both the evaluations' purposes and procedures. If administrators and teachers are reassured about the consequences and assistance of program evaluation, resistance to the evaluation may be reduced (Scriven, 1973; Suchman, 1969; Wolf, 1973).

The school organization may influence its cultures and subcultures. A "segmented organization," which separates schools by administrative levels and fields of teaching, or even by gender, could result in greater

resistance to evaluation by everyone within the school (Armstrong, 1985). Compartmentalization of personnel may tend to restrict communication within the school. An integrated organization, on the other hand, may facilitate communications which, in turn, may promote the acceptance of evaluative results.

Participation

The importance of the participation by teachers or information-users in decision-making and evaluation processes has been frequently suggested. Teachers or information-users who participate in evaluations are more likely to use evaluative results since, presumably, they understand their content and meaning (Boggs, 1984; Carter, 1973; Corbett et al., 1987; Davis & Salasin, 1983; Huang, 1987). When teachers perceive that they have sufficient control of the evaluation processes, they may respond positively toward evaluations (Paulin, 1980).

On the other hand, teacher participation in program evaluations may not necessarily serve to facilitate the use of their results (Fuhrman et al., 1988; Komp, 1988). Komp (1988) concluded that the efforts to encourage teacher participation in the process may work only for those teachers with a high need for independence and a low need for "authoritarianism." The converse could be

equally true; participation may not be an appropriate approach among teachers with a high need for authoritarianism and low need for independence. Komp further suggested that teacher participation in evaluative processes may have to be voluntary, otherwise it could give rise to even greater resistance to evaluations.

The Influence of Administrative Characteristics on Chinese Teacher

Chinese are influenced by Confucianism, Buddhism, and Taoism which teach them to follow "rules" (Hu, 1960; Latourette, 1964). They tend to be more authoritarian than Americans in comparable positions (Hwang, 1987; Singh, Huang, & Thompson, 1962). Thus, Chinese may more readily adapt themselves to a social system and its rules. They are likely to be involved in groups, take their worth and position within those groups very seriously, and are likely to share their concerns with family and friends (Hsu, 1981; Kuo & Spees, 1983; McDaniel & Soong, 1981). All of their concerns contribute to keeping their environment harmonious (Wen & Hsiao, 1990). From this point of view, evaluations may be easily accepted by Chinese teachers and may be conducted without opposition.

Since Confucianism has influenced the Chinese for thousands of years, traditional thoughts may influence their attitudes toward educational activities. "Li," a Confucian concept, prescribes "correct performance" as an important social rule. Therefore, "from very early time the Chinese stressed ceremonies" (Latourette, 1964, p. 582). Influenced by this concept during evaluations, the Chinese teachers may place greater emphasis on following prescribed procedures rather than on pondering the meaning of the activities.

Perceived Quality of Evaluation Methodology and Evaluators

Evaluation procedures may be questioned by teachers or users. Teachers may require assurances that the applicable evaluative criteria and methods will provide credible results before lending their support to the process (Huang, 1987; Wolf, 1973). Teachers are concerned with the extent to which evaluation methodologies are based upon the principles of scientific research (Suchman, 1967). These reservations are based on perception of ambiguous evaluation criteria, insufficient techniques for collecting information, and the reliability of results (Huang, 1987; Wolf, 1973).

The extent to which teachers trust evaluators and their estimations of evaluators' expertise may affect their attitudes toward evaluations (Paulin, 1980). If evaluators are trustworthy to teachers, teachers may accept their critiques and suggestions. Ultimately, who performs the evaluation may be more important to teachers than issues of evaluation procedures (Komp, 1988). Teachers may be more willing to accept friends or fellow faculty members as evaluators than persons they do not know.

In Taiwan, the evaluators are external to the schools, and they may give "grades" based on evaluative results. School administrators, therefore, view evaluators as being influential to them and their institutions. Chinese are readily influenced by persons of recognized authority (Hwang, 1987; Lao, 1977). The actions of evaluators who are university professors are potentially important to the attitudes of teachers. Because of the personality characteristics which prize harmony and concern for the welfare of friends, Chinese teachers would also respond positively to evaluative results if the evaluators were their friends; they would presume that friends would not harm them.

Components of Program Evaluation Design

Prior research has addressed evaluation as a general concept. Wentling (1980) defined evaluation of vocational education as "the collection of information and judgments to facilitate planning, to aid in the improvement of programs, and to meet accountability demands" (p. 19). To use evaluation as a vehicle for vocational program improvement and accountability, there are several components to be considered:

1) administrative or management organization, 2) personnel, 3) objectives, 4) evaluation system, 5) content, 6) learners being served, 7) utilization of resources, and 8) guidance, personnel counseling, placement, and other ancillary services of the program (Wentling, 1980, p. 35).

Sorenson and Suzuki (1978), as modified by Suzuki (personal communication, December 17, 1991), maintained that evaluations should address the following components: impacts; student achievement, enrollment, and retention; instruction; support services; and management. Because of the nature of the components and their relationships to teachers, teachers may respond differently to the various components of program evaluation.

"Impacts" includes those variables concerned with economic benefits (e.g., job and educational competence, job and educational placement), and social benefits (e.g., employment rate, taxes paid by former students).

These variables are the "results" of instruction, that is, they can be assessed after students leave or complete their vocational education. On the other hand, the component "achievement, enrollment, and retention" is concerned with students currently participating in programs. The component "instruction" includes program objectives and the instructional activities that enable students to achieve those objectives. Instruction is composed of instructional resources (i.e., people, materials, equipment, and facilities) and methods (i.e., the organization of resources).

The component "support services" includes custodial services, secretarial support, food services, and transportation, among others. Those services make instruction possible but do not directly effect learning. The component "management" includes planning, organizing, directing, and controlling instructional and support processes and resources. The primary concern of management is to assure effectiveness (achievement of student outcomes) at the least cost.

Chinese teachers may resist the consideration of certain evaluative information, such as information on student achievements, their personal levels of performance, learning activities, the utilization of material, and the maintenance of equipment and

facilities. These are directly related to the teachers' specific responsibilities, and the results in each area are regarded as their responsibility. If the evaluative results show deficiencies in those areas for which they are traditionally responsible, teachers may feel a "loss of face." On the other hand, Chinese teachers may not be concerned with the evaluation of other components, such as student placement, purchases of material and equipment, provision of support services, or even with management; none is regarded as a part of their traditional responsibilities or within their normal sphere of control. If the results show deficiencies in such components, teachers may not feel jeopardized because they would not "lose face" for them.

Summary

In Taiwan, the Ministry of Education is charged with the responsibility for setting program standards for all levels and types of schools. Vocational education in Taiwan is organizationally different than its counterpart in the United States; however, American concepts have been adopted for vocational program evaluations. The evaluation procedures employed are generally in accordance with the concept of the professional judgment approach. Although supposedly based on accepted

evaluation models developed in the United States, not all parts of those models are fully or even partially implemented. Furthermore, there are limitations in these evaluation procedures, including questionable objectivity, credibility, and replicability. The perceived shortcomings of the evaluation methodology may cause teachers to resist use of evaluative results.

Self-esteem and personality as well as the desire for autonomy may influence Chinese teachers' responsiveness to the use of evaluative results. In Chinese society, the importance of self-esteem is subsumed by the concept of "face." In addition, traditional personality traits may influence Chinese teachers' responses to the use of evaluative results. Chinese teachers may respond positively to evaluations and the use of evaluative results because of the high levels of autonomy they enjoy within classrooms. The attitudes of senior teachers in a group may influence other individual Chinese teachers' attitudes toward evaluations because of their "father" role.

Three administrative characteristics appear to be interrelated insofar as they may influence teachers' responses to evaluation. Sufficient planning, as well as teacher participation in conducting evaluations, may facilitate communication; conversely, effective

communication may help the evaluation planning process. Chinese teachers may readily respond to requests to participate in evaluations because of their tendency to follow rules and to avoid conflicts with their administrators. Chinese teachers might also respond positively to evaluative results if the evaluators were either their friends or university professors.

There are several major components in vocational programs, and Chinese teachers may respond differently to the evaluative results of the various components. If the results are critical of components within teachers' purview, they may resist the results and protect themselves from "loss of face." If the results address components that they perceive are the responsibilities of school administrators, teachers may ignore the results because they will not hurt their "face."

Chinese thought has been influenced by tradition for thousands of years. This influence on their personalities may lead Chinese teachers to respond to evaluations differently than American teachers. Influenced by "li," Chinese teachers may follow the evaluation procedures ritualistically and, therefore, not question the activities. The concern with "loss of face" may increase Chinese teachers' resistance to evaluations. On the other hand, Chinese teachers may accept

evaluations and their results because of other cultural characteristics, such as emphasis on harmonious relationships with colleagues and administrators, social orientation, tendency toward authoritarianism, and respect for evaluators who are teacher educators.

The possible factors which may influence Chinese teachers' attitudes toward the use of evaluative results are: self-concept, personality, desire for autonomy, subculture, evaluators, perceived quality of evaluation methodology, and the components of evaluation design. The influence of administrative characteristics which include planning, communication, and participation is less clear; however, traditional concepts may affect those administrative characteristics' influence on Chinese teachers' attitudes toward evaluations.

II. METHODOLOGY

Sample

The sample consisted of 12 teachers who were assigned to four vocational high schools (Table 1). Because of limitations on access, only teachers in industrial-related programs were identified; however, teachers in other types of vocational high schools should have similar views to this group. Twelve administrators for four of these high schools and one additional vocational high school and ten external evaluators who are teacher educators were used to corroborate and supplement the information provided by the teachers. Purposeful sampling was used to facilitate the establishment of trust and acceptance of the investigator by the subjects. First invited to participate in this study were teachers or administrators who knew the investigator. They were then asked, "Who knows a lot about evaluation, and who should I talk to?" In this manner, the "snowball" technique was applied to reach other teachers and administrators who might be "data rich" subjects.

Table 1. Summary of the Number of Teachers and Administrators in Each School.

School	Status of Participant	
	Teacher	Administrator
School A	2	3
School B	4	3
School C	2	3
School D	4	2
School E	0	1
Total	12	12

Note: Three teachers had been administrators.

In school A, one teacher and one administrator were known to the investigator. The administrator introduced another administrator, and the teacher introduced another teacher and a third administrator to the investigator. Thus, five agreed to participate in this study. In school B, one teacher and one administrator were known to the investigator. The administrator introduced two teachers and two administrators, and the teacher introduced another teacher. Therefore, there were seven participants from school B. A former teacher in School C introduced the investigator to two teachers and three administrators who had participated in evaluations in this school. He also introduced one administrator in school E to the investigator. In school D, one administrator and one teacher were known to the investigator. The administrator introduced three teachers, and the teacher introduced another administrator. Thus, there were six participants from school D.

Three teachers had previously been administrators. Among the 12 administrators, there were four deans, four chairpersons, and four chiefs of sections. All participants were male. Although there was only one participant from school E, school E was not excluded from this study since the information provided by this

participant was similar to the responses of most of the other participants. All of teachers and administrators who were identified were contacted, and all of them agreed to participate in this study.

The ages of the teachers ranged from 32 to 64 years and averaged 40 years (Table 2). The ages of the administrators ranged from 32 to 56 years and averaged 39 years. Most teachers and administrators had earned at least a bachelor's degree in vocational education. Most of them went to vocational high schools to teach right after graduating from universities. Only one teacher and one administrator had industrial work experiences before they became vocational high school teachers.

To confirm the information collected from the teachers, ten persons who had been external evaluators were interviewed by the investigator. Nine of the external evaluators were faculty members of vocational education departments or graduate departments in the three national normal universities or university of education. These three universities are: National Taiwan Normal University in northern Taiwan, National Changhau University of Education in central Taiwan, and National Kaohsiung Normal University in southern Taiwan. The investigator made contact with nine external evaluators through introductions by faculty members known

Table 2. Average and Range of Participants' Ages.

Status	Ages		
	Youngest	Average	Oldest
Teacher	32	40	64
Administrator	32	39	56

to the investigator or were identified by them. The investigator met the remaining external evaluator at a conference while in Taiwan. The external evaluators may not have evaluated the same schools or the five schools represented in this study. They responded to interview questions based on their general impressions without specifying any school. However, because of the potential differences between public and private schools and between high school and college levels, the investigator asked the evaluators to associate their responses with the different school systems.

Setting

In vocational high schools, about 40 to 50 students belong to a class guided by a teacher. Each class has its own classroom but may share a workshop or laboratory with other classes. Students in a class generally participate as a group in learning activities. The official ratio of the numbers of classes to teachers was one to three, and each class had an average of three teachers. One teacher is expected to be proficient in general subject matter. The other two teachers specialize in vocational subject matter. The sizes of schools are usually based on the numbers of classes. Graduates of vocational high schools who wanted to work

have been able to find employment since labor market demand has been relatively high. Most of the graduates want to attend a technical colleges, but they must first pass a joint entrance examination. Many of those who do not pass a joint entrance examination go to "cram" schools to prepare for the next year's examination.

School A offered fewer than 30 classes. Less than half of its graduates wanted to enter the work force immediately. School B offered from 40 to 45 classes, and about one-half of its graduates found positions in the labor market. School C offered from 55 to 60 in day school classes and fewer than 25 night school classes. Following graduation, approximately 40 to 50 percent of students were expected to enter the labor force. School D offered from 50 to 55 classes, and most of its graduates were expected to continue their studies in colleges. School E offered approximately 40 to 50 classes. More of its graduates were expected to continue their studies than enter the work force immediately.

School B had conducted industrial vocational programs for more than 40 years. Schools D and E were constructed during the first phase of the "vocational industrial education curriculum reform program" in 1979 to 1981. School A had been changed from a comprehensive high school to a vocational high school in the same period.

School C was originally a commercial vocational high school; it then added industrial programs during the implementation of the first phase of the reform program.

Procedure

Qualitative methods were used to encourage teachers, administrators and external evaluators to express their feelings about evaluations and to explore for unidentified variables. In-depth interviews based on open-ended questions were conducted to acquired information.

Interview

A list of open-ended questions were prepared for interviews with teachers and administrators. The questions were as follows:

- (1) What were the procedures of the evaluation(s) that you experienced?
- (2) How do teachers feel about program evaluation and its results? Why?
- (3) Who were the evaluators? How do you feel about them?
- (4) What would encourage teachers to participate in evaluation?

- (5) What is your age? Educational background?
Teaching experience?

Another list of interview questions was prepared for external evaluators. The questions for the external evaluators were:

- (1) What were the procedures of the evaluation(s) in which you have participated?
- (2) What are your feelings and those of school teachers and administrators toward the evaluation(s)?
- (3) What are your suggestions for improving the conduct of evaluation?

Follow-up questions were asked to provide detailed descriptions of areas of concern only when needed. A typical follow-up question was: "In general, do you feel the evaluation was necessary?" In addition, one or two participants from each school were asked about the school itself. The information requested was descriptions of the relative size, educational history, and the placement of its graduates. While interviewing the external evaluators, time restrictions did not permit asking every participant every prepared question. However, a few questions based on responses from teachers were submitted to the evaluators. These questions were: "How do you feel about teachers' desire to participate in evaluation

teams?" and "Do you think teachers and students would have answered you truthfully?"

All interviews were conducted and completed during February and March 1992. Formal follow-up interviews were not necessary; however, some of the questions concerned with personal and school characteristics, which were not collected in the formal interviews, were gathered by means of telephone conversations. Most of the interviews were conducted in the teachers' workshops or administrators' offices on their campuses. Four interviews were conducted at the participants' homes, and one interview was conducted at a coffee shop.

Subjects were asked to allow this investigator to audiotape interviews. They were informed that the recorded information would be transcribed verbatim. When participants asked not to be taped or when the interview location was not suitable for tape recording (e.g., interviews which took place in noisy workshops), notes and direct quotes were recorded by hand in Chinese. Interviews with four teachers and five administrators were tape recorded; substance of the other eight teachers' and seven administrators' interviews were hand recorded. None of the ten external evaluators were tape recorded; it would have been viewed as being impolite.

Participants whose interviews were tape recorded provided more information than those who were not tape recorded. This was because the investigator was able to encourage them to express themselves freely without concern for accurate documentation by handwriting. The negative responses from both groups seemed to be comparable; however, those who were tape recorded seemed to give more positive responses. Teachers might have been concerned that the tape recorded information would give context for information they provide, and this context could threaten harmony. They may have therefore provided more positive responses to compensate for their criticisms, especially of persons who were authority figures. To criticize principals and external evaluators who are teacher educators would be perceived as impolite in Chinese society. Therefore, positive answers from tape recorded subjects were considered with considerably more caution than information which tended to be negative toward officials and teacher educators. Because all of the participants interviewed with tape recordings were from two schools, the different responses between the two groups may also have been influenced by institutional or other factors.

The time spent with teachers and administrators ranged from 25 to 80 minutes. Most teachers required

less time than administrators because, as it was found, they were involved only minimally in evaluations. Since some of the evaluators had scheduling problems, the time spent with evaluators ranged from 15 to 70 minutes. Both during and after the interviews, related supporting information, such as the evaluation handbooks and final evaluation reports, was collected from school administrators and external evaluators.

Data Analysis

The interview's content for each participant was translated into English and typed as a script. The total script length was 107 single-spaced pages. The identities of participants were kept confidential; only codes were used on the transcription sheets to represent individual subjects. Marshall and Rossman's (1989) five analysis stages were employed: (1) organizing the data; (2) generating categories, themes, and patterns; (3) testing emergent hypotheses; (4) searching for alternative explanations; and (5) writing the report.

III. FINDINGS AND DISCUSSION

The original purpose of this study was to explore the factors which may influence vocational teachers to use evaluative information in improving their instruction. Documents from Taiwan indicated that evaluations of high school vocational programs are based on American theory and practices. The initial analysis attempted to inductively paint a picture of these factors; however, the dominant and pervasive picture appeared to be quite different than the one implied in the documentation. The picture seemed to indicate that evaluative methodology now employed in Taiwan is subjugated by cultural determinants. This view was drawn by the teachers and confirmed by administrators and the external evaluators.

Difficulties of Current Evaluation

Most of the teachers perceived evaluations as potentially beneficial or necessary under certain conditions. Although some of the teachers disagreed, most of them seemed to believe that evaluations as they

are currently conducted made little difference, if any, to what teachers did.

I don't think that the results have any influence. When the evaluators come, we just present a good appearance. After they leave, everyone returns to old teaching habits.

Teachers seemed to feel that evaluations were ritualistic, viewed only the surface of programs, and failed to genuinely evaluate teaching practices.

Some teachers say that: "The evaluations and surveys are not useful. They are the same every year."

The common problem is that the evaluations are just going through the motions. . . .[The evaluators] pay too much attention to documentary information.

The responses from the administrators somewhat supported the views of their teachers, but they tended to be more positive than their teachers. The majority of the current administrators indicated that evaluations would be effective if some procedures were improved. At the same time, they expressed reservations about the effectiveness of the evaluative results.

There is no special influence because the results are used only as referent information [on policy makers].

Evaluation is good, but should not be conducted too frequently. . . .Evaluation has a positive function, but needs to be improved in some areas.

Similar to the teachers, most of the administrators felt that the evaluations had become ritualized, were not objective, and failed to describe actual conditions.

Evaluations, therefore, were viewed as extra work for everyone.

The problem is how to execute them appropriately so that the evaluations lead to credible results.

Evaluations are a big ritual, like participation in a pageant.

From the teachers' viewpoint, evaluations are an additional task because they need to prepare all of their information in just a short period of time. Their time is taken up by regular teaching preparation.

The responses of most of the evaluators toward evaluations confirmed those of most of the other participants. Evaluators felt that evaluation in itself was both beneficial and necessary but some processes needed to be improved.

Evaluation is good, but it can hurt people. . . .Using "visitations" instead of "evaluations" would be better since visitations would be easier for the schools to accept. A visitation only involves reflection and a report, but an evaluation provides rankings [of schools].

The evaluations are still necessary. The problem is how to make them appear to be a normal [part of teaching activities].

The effect of evaluations can be seen even before the evaluators arrive at schools [because the local staff prepares and makes improvements prior to the evaluations]. The "arrival" of evaluators is the least important part.

The evaluators confirmed the teachers' view that evaluations had become ritualized and that the evaluations imposed extra workloads on the schools.

The evaluation easily becomes symbolism. Some problems still can't be solved.

The problem with evaluation is that it requires funding, and it is a strain on personnel. Both sides [schools and evaluators] become tired.

From the overall responses across teachers, current and former administrators, and evaluators, the necessity of conducting evaluations in schools in Taiwan was confirmed. However, the participants also indicated that evaluations had become ritualized. Many phases of the evaluation process require improvement, such as the regulation of procedures and the objectivity of the findings.

The evaluation procedures which are most widely used in Taiwan are based upon the professional judgment approach. The ritual functions of evaluation are the most readily observed, but most ignored, phenomenon in the professional judgment process (Floden & Weiner, 1983). Huang (1987), who was on the education staff at the National Taiwan Normal University, indicated that evaluation activities could gradually become "ritualistic," thus limiting their effectiveness. Huang (1989) subsequently observed that the execution of program evaluation in Taiwan was an "administrative model" that was based upon existing authority at each administrative level. He stated that this traditional model can easily become ritualized since the suggestions

proposed by experts would not necessarily be practical or applicable, and many teachers would therefore not understand the purposes and goals of evaluations. The existence of ritualism in evaluation in Taiwan may be influenced by the traditional Chinese concept of Li, a Confucian belief that correct performance should be valued as an important social rule. Influenced by this concept, the Chinese tend to place great emphasis upon following "correct form" rather than on pondering the meaning or substance of their actions.

One characteristic of Confucianism is that its doctrines recognize the distances and paradoxes which exist between ideal goals of ideology and actual behaviors. It is implicit in Chinese society that disagreements between ideal concepts and actual behaviors exist. Influenced by such concepts over a millennia, the Chinese readily admit that dichotomies can exist between what they say and what they do (Wen & Hsiao, 1990). In Chinese society, it is common to place "emphasis on harmony regardless of reality" (p. 4). As a result, Chinese school administrators and evaluators, when conducting evaluations, are inclined toward the observance of certain procedures or protocols without paying a great deal of attention to the legal purposes or practical implications of evaluation. Of course, they

may at the same time perceive the existence of discrepancies, but continue to allow them to exist because of their concern for harmony.

One of the major concerns voiced by teachers focused on the accuracy of evaluative information.

Before the evaluations were conducted, department chairs [and/or] teachers told the students, "Don't speak at will, and think about what to say before answering questions". . . .Students would answer, "Yes," to questions such as, "Did your teachers use overhead projectors in classes?" no matter whether they really did or not. Is that right? If you were the student, would you say, "No"?

Schools try to enhance, to modify, and not to display reality. But, it's just like cleaning your home when you expect guests. Sooner or later, you will get used to it and remind yourself to keep clean.

Administrators recognized that schools manipulated information presented to the evaluators. The evaluators also perceived that the information they collected from the schools had been manipulated. None of the administrators seemed to view this phenomenon as abnormal. Indeed, some of the respondents felt that the manipulation of information by the schools was acceptable.

Everyone would prepare for evaluation. . . .Of course, it would be better if fewer deficiencies were observed. It's better that what all evaluators see are the good points. . . .If you come to see me and tell me when you are coming, I'll apply cosmetics to some degree, right? It is a common human response. It is normal. It is not right to say that this is abnormal. [Current administrator]

Evaluation is misleading, but the [perceived] concept of evaluation is not correct. If [the subjects] take "vitamins" before a "health examination," we will not see the real situation, and there will be bias.

[Evaluator]

"Face" is an important concern in Chinese society.

The manipulation of evaluative findings may be viewed as "face work" (Goffman, 1955). Hwang (1987) claimed that face work meant the "projection of self-image and impression management" (p. 960). To carry out face work is to "shape and instill in the minds of others a particularly favorable image" (p. 960). Referring to Goffman's "dramaturgical theory," Hwang further indicated that face work was similar to "front-stage behavior" in which individuals show themselves favorably to their audiences.

Thus, during the evaluations, what the school administrators and evaluators practice is akin to actors providing a front-stage performance. Schools try to modify their appearance to give the evaluators certain favorable impressions. Because administrators are usually the persons responsible for manipulating this appearance, it is understandable that they would feel that the practice is acceptable. In turn, evaluators may not want to criticize this practice since criticism would serve to embarrass school personnel. In Chinese society, to embarrass others is to cause them to "lose face,"

which could then harm their self-esteem. According to the principle of "reciprocity," the person whose self-esteem is hurt will at some point in the future cause the person who has been the source of embarrassment to "lose face" (Ho, 1976; Hu, 1944; Hwang, 1987; 1990; Wen, 1990). Reflecting this concern, the evaluators would choose to "save the face" of the school personnel in order to maintain harmonious relationships.

Another concern expressed by teachers about evaluations was the influence exercised by school principals on results of evaluations.

The evaluations are very important to some principals; therefore, they use their social relationships to influence the [evaluation] results, such as having dinner with evaluators they know.

Responses from current and former administrators, as well as from the evaluators, confirmed the teachers' feelings that principals and other school personnel influence evaluations in this manner.

Teachers feel that the results will be good so long as the principal can handle it well. [Current administrator]

If the evaluators are friends of some people in the school, they will add points to those items which [perhaps] should have been given fewer points. [Former administrator]

The quality and backgrounds of all of the evaluators are different, and some of them may accept hospitality from the schools. [Evaluator]

The attitude and leadership exercised by the principals were considered to be important to the conduct of program innovations and evaluations (Huang, 1989; Wolf, 1973). Huang (1989) stated that many Taiwanese principals devoted the greatest part of their attention to physical conditions of the schools and the maintenance of social relationships outside of the school.

For most Taiwanese principals, the principalship is a tenured position and will be the highest point of their careers. They usually have to serve many years in smaller schools before moving to larger schools, and then retire from their principalships. In their positions, the principals encounter complex social networks and pressures in which "favours" are frequently asked both from them and by them. The social pressures are usually exercised by their friends, relatives, and local politicians, among others. These favours may intrude upon matters of personnel decisions, equipment purchases, or construction contracts (Chang & Goldman, 1990). Therefore, the nature of the principals' "normal" duties may give teachers the impression that the principals will solve most of their problems by the "normal" exercise of their social skills.

However, as one participant in this study said, "Evaluations are largely focused on the principal and

administrators." Thus, principals measure the results of evaluations in terms of the influence that they might have upon their careers, such as allowing them to move from smaller to larger schools. Therefore, they use their social resources to influence the evaluators and to assure that the evaluative results are favorable. In cases where the evaluators are personal friends of the principals or other school administrators, it would be assumed that the results would not embarrass the schools since the evaluators, as good Chinese, would be expected to "take care" of their friends (Loridas, 1988; McDaniel & Soong, 1981). This is especially true when the evaluators accept dinners or other favors from the principals and other administrators; these favors are expected to result in favorable evaluative findings or, at least, non-critical ones in return. This is based on "rule of reciprocity," a long-standing custom in Chinese society (Ho, 1976; Hwang, 1987; 1990; Wen, 1990).

One teacher's comments seemed to sum up the cultural influence on evaluations:

Chinese society is like that; there are always small defects, less efficiency, and inflexible personnel. All good and bad [phenomenon] are [like the old] traditions which are unlikely to change. . . .The burden of five thousand years of Chinese history is too great.

Like the teachers, the current and former administrators also directly observed that traditional Chinese cultural

concepts influenced the evaluation procedures and their results.

The results are influenced by "face." [Current administrator]

It is troublesome that there are too many "favors" asked. [Former administrator]

The universities in which we teach also have to be evaluated. The Chinese are always concerned about others [and won't cause trouble for others]. [Evaluator]

These three examples typify the three traditional concepts that mold the Chinese personality: face, favor, and harmony. The interactions between face and favor are key influences in Chinese society. To ask for and to return favors are means for both parties to gain face (Ho, 1976; Hwang, 1987; 1990). Such interaction is used to maintain harmony within the working environment and to show concern for the well-being of friends (Loridas, 1988; McDaniel & Soong, 1981). The Chinese believe that their successes will be dependent upon the degree to which they can utilize and manage their social resources and networks. Therefore, while at work, the Chinese seem to devote as much attention and energy to the maintenance of these social relationships and what would otherwise be termed "personal concerns" as they do to what Americans would consider their work. Consequently, these social rules are integral concerns within the evaluation process, serving in some instances to overrule otherwise

rational evaluative processes and their results and recommendations.

The evaluators may themselves be a factor of influence in Taiwanese teachers' feelings toward the evaluation process. How teachers respond to evaluators was found to be an issue of concern in the present study. Teachers' perceptions of the external evaluators were mixed. Some teachers indicated that the evaluators were polite to them and understood their situation.

When the evaluators came, there was no pressure from them. They were quite polite because they were our teachers in the universities. They understand us because they are also in this field (major). . . .The evaluations should not be necessary.

Other teachers felt that the evaluators were not close enough to the problems of vocational high schools to be able to understand the situations that teachers faced.

Most of [the evaluators] are from normal universities, and they do not really understand the practical situations. . . .The evaluations have no influence upon the teachers.

I think the schools can do it by themselves. They just need to check whether or not teachers follow the government's guidelines. Outsiders are not required, and it is meaningless for those evaluators to undertake this visit.

The teachers who negatively responded to the evaluators also tended to respond negatively or conditionally to evaluation. However, the few teachers who responded positively to the evaluators did not

necessarily respond positively to evaluation as it is currently done.

Except for external evaluations, "parallel evaluations" should be conducted in which the teachers from different schools evaluate one another.

Some former and current administrators also suggested that teachers should participate in the evaluation teams so that the practical situations would be more readily understood.

There should be experienced vocational teachers participating [on the evaluation teams] so that teachers will accept the evaluation results. Also, this will serve to encourage the teachers [to use the evaluative results].

On the issue of teachers' participating on evaluation teams (parallel evaluation), the evaluators opinions were both positive and negative:

There is no theory which can be used to support "parallel evaluation." It can't be structured, and its value would be low.

"Parallel evaluation" is a very good idea; it is like the concept of "peer group" [analysis]. There will be bias if the evaluation team consists only of scholars and experts. I agree with this idea very much.

The current and former administrators' views of external evaluators' qualifications mirrored the teachers' perceptions. Some of the administrators indicated that the evaluators were helpful to them, but others felt that the evaluators did not understand them or their problems.

Generally speaking, the professors [evaluators] don't understand that the situations of vocation highs are different from those in the colleges and universities.

They are professors from the universities, and they understand our situations.

The administrators who viewed evaluators negatively seemed to consider evaluations conditionally or negatively. Unlike teachers, however, the administrators who seemed to view evaluators positively also viewed evaluations favorably.

With respect to their own qualifications, some of the evaluators admitted that they were not necessarily experts in teaching, education, or evaluation. One evaluator stated that "the selection of evaluators is very important." Another evaluator noted that "because the quality and background of all the evaluators are different, [those less qualified] accept favors from the schools." However, some of the evaluators were confident in the conduct of their duties.

After having been to several schools, we can sense what is good and bad. . .therefore, the evaluators can still find the truth from the "top of the iceberg." We can explore the truth from interviews, teachers' attitudes, the relations between teachers and students, and from students' learning activities. From the procedures that schools use to prepare for evaluation, we can also understand the efficiency of administration and leadership in the school system.

Teachers viewed administrators as a group distinct from their own. One teacher stated that "because

administrators are appointed by the principal, they dare not say things at will during evaluations." Most of the teachers claimed that only the administrators were involved in the evaluations, because only the administrators could solve the problems found by evaluators. Teachers felt that they had little influence on the conduct of evaluations.

Administrators are involved more [in the evaluations than we are]. Only the department chair and the administrators of the guidance office deal with evaluations. Teachers just do what chairs ask them to do, such as exhibiting their workshops. Teachers are not involved in evaluations very much.

In general, the administrators are those who can really handle the evaluation. We can't do it; we can only make suggestions. If changes are made [based on suggestions], that's good. If they can't change, teachers can't do anything about it. That's the way it is.

About the content of evaluations, the chair understands [the results] more [than we do]. Evaluation doesn't involve teachers. It only involves the department chair and the dean of the guidance office.

For the greater part, the teachers felt that the evaluations were irrelevant to their well-being and paid relatively little attention to them. In Taiwan, teachers in public schools have a high degree of job security. In this sense, activities other than teaching are often viewed as the imposition of extra work. The teachers seemed to recognize that if the evaluative results were poor, their job security as well as other benefits

provided by the government would not be affected. The stable working environment provided in Taiwanese public schools may, in fact, encourage teachers to avoid involvement in activities they regard as irrelevant to their positions.

Most of the administrators indicated that teachers were passive toward preparation for evaluations. They indicated that the evaluations could be used as an outside force to push teachers toward improving their teaching. Chairpersons claimed that they faced the heaviest duties and the greatest pressure during evaluations since they worked virtually without help from their teachers.

Evaluation has an impact, and it sends a message. The evaluation is necessary. Some teachers have inertia; the [education] system is inflexible, and there is carelessness.

Evaluation can be an outside force to push [people] because it's difficult for us, as Chinese, to ask technicians [and teachers] to do something if they are not already doing it.

The chair is the busiest person while preparing for the evaluations. The leadership of the chair in the department is important. If the chair can mobilize all the teachers in the department, most of the work can be easily done.

The administrators viewed the preparations for evaluations as their primary duty and responsibility; however, they indicated a desire for assistance from teachers and related personnel (e.g., technicians) while

preparing for the evaluations. At the same time, the administrators were hesitant to ask the teachers for help. Since it is the administrators' responsibility, with respect to the norms of the schools' cultures, to maintain a harmonious environment, they were reluctant to impose extra work on the teachers (Loridas, 1988; McDaniel & Soong, 1981). However, to some degree, the administrators welcomed the evaluations, since the impending external evaluations could be used as a reason for requesting teachers and technicians to perform duties that the administrators would not otherwise ask them to do.

In general, Chinese are used to working within the interactions of "face" and "favours" to maintain a harmonious environment, thus avoiding the process of pointing out real defects that would serve to embarrass others. Influenced by the discipline of Li and the tenets of Confucianism, Taiwanese school administrators and evaluators tend to conduct evaluations as ceremonious events, following certain forms and procedures regardless of the intended meaning of the evaluations. The influences of the traditional concepts as well as the limited perception of the role teachers play in the evaluation process would seem to overshadow the influence of other factors, such as self-concept and the

qualifications of the evaluators. These cultural injunctions impose limitations upon the exercise of evaluations based upon professional judgments in Taiwan. As a result, it should not be surprising that Taiwanese teachers feel the need to improve evaluation procedures. Current practices do not engage teachers in a systematic and sustained means for improving the quality of vocational education in Taiwan.

Characteristics of Alternative Evaluation

Because of the influence of traditional Chinese social rules (i.e., "saving face," "reciprocal obligation," and maintaining harmony), the current evaluation methodologies are ineffective for evaluating the vocational programs in Taiwan. If program improvement is still a goal of Taiwan's educational establishment, it seems reasonable to ask a further question which is similar to the initial research question of this study: What should be the characteristics of an alternative evaluation methodology for Taiwan's vocational high school educational programs? Analysis of findings indicated that the exploration of this question may have several dimensions.

First, evaluation may need to start from and focus on the base level. Teachers indicated that they were not

involved in evaluation, and they felt that the evaluations and their results were irrelevant to their teaching.

Teachers just do what chair asks them to do, such as the exhibition in workshop. Teachers are not involved in the procedures very much.

I don't think that the results have any influence. When the evaluators come, we just do "face work." After they go away, everyone still teaches in the original way.

Teachers felt that the external evaluators do not understand what happens in high school. One teacher stated that evaluation could be done at school level and does not need the external evaluators.

The evaluators are from universities, and they are too theoretical. They are not very suitable to do their duties.

I think the schools can do the evaluations by themselves. They just need to check whether or not teachers follow the government's guidelines. Outsiders are not required, and it is meaningless for those evaluators to undertake this visit.

One external evaluator admitted that they could not realistically evaluate the school programs because they would not embarrass school administrators and teachers.

The universities which we are teaching are also evaluated. Chinese are always concerned about others' ["lose of face"].

As Huang (1989) claimed, program development in Taiwan used an "administrative model," and evaluations were conducted from the top downward in the system.

Evaluations were directed by the higher levels of the

education system. The external evaluators were from industry, universities, and provincial and national education departments. The external evaluators could not study the programs realistically because they were concerned with the "face" of others and tried to maintain harmonious relationships between them and school administrators.

Since teachers felt that the external evaluators did not understand their programs, some of the teachers indicated that their colleagues should serve as evaluators.

Teachers should participate in the evaluation team.

There should be "parallel evaluation" which means we teachers evaluate our own programs.

It seems reasonable to assume that the quality of Taiwan's vocational educational programs ultimately rests with teachers in classrooms. It then follows that an appropriate approach to evaluation is to focus on this base level of the vocational education system, the teachers. If teachers are responsible for program evaluations, information may be better collected and then used to improve the quality of instruction (ODE, in review).

Second, teachers may need resources if they are to assume evaluation responsibilities. The four resources

identified were: procedures and material, time, help, and training.

Teachers need procedures and materials to follow.

Teachers showed great concern for the improvement of the evaluation methodology.

It is not useful to evaluate the sizes of workshops and campuses. They are fixed; they cannot be changed.

The evaluators should emphasize not only on paper information but also student learning activities.

The evaluators should improve the way they give test to and interview students. Also, they should improve the forms they use to record information [those forms need to consist of more items to make the results objective].

Teachers felt that the methodology may need to be improved or included to collect information on: (1) student achievements in routine learning activities and examinations, (2) the comprehensiveness of evaluation content, and (3) effectiveness of equipment and of its maintenance. The first area, student achievements, is concerned with student outcomes; the other two areas are concerned with processes which facilitate students' learning.

Influenced by Li, a set of Confucian beliefs, Chinese tend to follow expected forms for accomplishing their duties (Latourette, 1964). A clear description of standards and procedures is needed for teachers to follow while conducting their evaluation duties. The materials

and procedures should address: (1) the participation of teachers in evaluations, (2) the consistency of applications, and (3) the validity of what is evaluated.

Teachers need help from experienced and expert teachers. While evaluating their programs, teachers may need expert advice to help them solve problems and to view their programs realistically. As the findings of this study have shown, the teacher educators who served as external evaluators may not have credibility with teachers. Teachers may not accept help from "outsiders" who do not understand their situations in the high schools. One school administrator indicated that experienced teachers are respected by other teachers; therefore, they may be the appropriate persons to help teachers who are conducting evaluation as their suggestions would be accepted. The experienced teachers are, generally, the senior ones; they should be venerated by junior teachers in Chinese society (Hu, 1960; Latourette, 1964). The administrator also proposed that asking experienced teachers to help other teachers encourages all teachers devoted to teaching because they would like to be respected and appreciated (Jablonski, 1991).

There should be experienced vocational teachers participating in evaluation so that teachers would more likely accept evaluation and its results. Also,

it is like an encouragement to [the experienced] teachers, too.

However, in reality, because not all experienced teachers are expert in their fields, the more appropriate persons to help teachers may be expert teachers. In Chinese society, expert teachers would be respected by others because of their knowledge and wisdom (Hu, 1960; Latourette, 1964). Expert teachers have credibility with other teachers because they have expertise in their fields and should be able to view programs realistically. They also have credibility with administrators because of their "father" role in schools. In Taiwan's secondary schools, the principal appoints teachers to administrative positions in the school. These appointments are changed after several years. Most senior teachers have had the opportunity to serve as administrators.

Senior teachers tended to be more positive toward evaluations. Among the participants in this study, the senior teachers, especially those who were more than 50 years old, showed positive attitudes toward evaluations.

Evaluation is necessary. It is effective. The results are very practical. We do not see resistance or protest to them.

If there is no evaluation, there is no competition, and the defects cannot be improved. Evaluation has an encouragement function.

The evaluators are very fair to us. While we are teaching, the evaluators will stay there for three to five minutes to listen to us. Evaluators can encourage us. They are very polite.

Therefore, because of their "father" role, senior teachers may influence the attitudes of other teachers in the group toward evaluations.

Teachers, expert teachers, and administrators need training. Most teachers felt that they were irrelevant to evaluation, and they did not understand its purpose.

They [the evaluators] should clarify what the purpose of evaluation is. I feel that administrators also do not understand the purpose of evaluation.

I do not know much about evaluations because we teachers are not involved in evaluations very much. Administrators understand those activities more than we do [you may need to talk with them if you want to know what happened].

One evaluator indicated that evaluations were misunderstood because Chinese would follow certain perceived forms without understanding the meaning of the activities (Hu, 1960; Latourette, 1964).

The meaning of evaluation is misunderstood, and the [perceived] concept of evaluation is not correct.
[Evaluator]

Therefore, before conducting evaluations, teachers, expert teachers, and school administrators will need training to understand the purposes of evaluation. They will need to learn how to use the material and procedures for correctly collecting, analyzing, and reporting data. Teachers need to be empowered so that they can see

evaluation as part of their responsibility and pay attention to it.

Evaluation is necessary because some teachers suffer from inertia and need to be stimulated. [Teacher]

Evaluation can be an outside force to push teachers to work. It is difficult for us Chinese to ask teachers and technicians to do something if they have not done it before. [Administrator]

Teachers need to have time allocated for training and the performances of their new responsibilities. Teachers felt that evaluations required extra work from them because the activities were not in their schedules.

Evaluations are extra works for teachers, and they are unwilling to do this work. [Teacher]

Some teachers do their own routine activities [i.e., their own businesses] while they do not to teach. If the evaluation or visitation occurred at that time, what should they do? [Administrator]

To perform evaluation responsibilities, teachers, as well as senior expert teachers and administrators, need time allocated for training and to do their evaluation duties. Once these activities are part of their regular work schedule, they become a part of their regular responsibilities. Taiwanese teachers may readily accept this additional duty because as Chinese they will fulfill their social roles (Hwang, 1987; Singh, Huang, & Thompson, 1962).

Third, information needs to be provided to decision makers using a bottom-up approach. The traditional

approach to submit information is top downward (Huang, 1989). Teachers felt that this traditional approach did not improve their programs.

There is not much effect [from evaluation]. Policy has already been decided on what to do, and the evaluation is only a tool and provides supportive evidence on the policy. If the result is not the same with policy, they still dare not and do not use the results of evaluation.

It seems a more appropriate approach would be to migrate information from bottom to the top since the information would be collected by teachers, the base level (ODE, in review). Selected information that is needed by school administrators would first be passed up to them by the teachers. This information would be in the form of recommendations for overall program improvements. These improvements should be for solving current, or preventing potential, program deficiencies. No reference should be made or implication drawn that would jeopardize teachers' "face."

Selected information that is needed by regional education departments would then be passed up to them by school administrators. The information should also be in the form of recommendations for improvements. These improvements should be for solving current, or preventing potential, program deficiencies noted by teachers. Information should not be used in any manner that would

cause principals or other school administrators to "lose face."

Selected information that is needed by the Ministry of Education would be passed up from the regional education departments. The information should again be in the form of recommendations for improvements proposed by the schools. In the same manner as for prior levels, these improvements should be for correcting current, or preventing potential, deficiencies. No reference should be made or influence drawn which would cause anyone below the Ministry to "lose face."

The use of the recommendations by all levels above the base must recognize the importance of "face." Failure by school administrators, regional education departments or ministry officials to receive or use information in that manner might encourage the manipulation of information by teachers, school administrators, and provincial department officials.

Before the evaluations were conducted, department chairs [and/or] teachers told the students, "Don't speak at will, and think about what to say before answering questions". . . .Students would answer, "Yes," to questions such as, "Did your teachers use overhead projectors in classes?" no matter whether they really did or not.

Schools try to enhance, to modify, and not to display reality. But, it's just like cleaning your home when you expect guests. Sooner or later, you will get used to it and remind yourself to keep clean.

Every level needs to give feedback to its subordinate level after the information is passed up to them. Frustration over the lack of feedback was indicated by school administrators who were involved in the current evaluation process.

Sometimes, the bad feeling is that the response has no feedback. The thing that I most dislike is that the responses have no feedback.

Teachers are disappointed because they expect that evaluation can improve teaching, but it cannot.

Similar frustration may be experienced by teachers when they study their own programs. All recommendations must be viewed as essential to the quality of vocational education in Taiwan's vocational high schools. Decisions about priorities which manifest themselves in implementation plans or schedules must reflect these recommendations. Reasons for assigning priorities should be clearly communicated to teachers.

From a long-term viewpoint, Total Quality Management may be the solution to overcome the deficiencies of program evaluation in Taiwan. Total Quality Management is:

A cooperative form of doing business that relies on the talents and capabilities of both labor and management to continually improve quality and productivity using teams (Jablonski, 1991, p. 4).

This concept is based on Deming's philosophy of business management which focuses on "quality" in regard to

customers' needs, processes, and products (Aguayo, 1990; Gabor, 1990; Gitlow & Gitlow, 1987). The techniques employed in Total Quality Management can develop positive attitudes in administrators and teachers, "regardless of the culture" (Jablonski, 1991, p. 7). Based on this philosophy, Jablonski (1991) proposed six principles of Total Quality Management which he summarized as follows:

1. A customer focus,
2. A focus on process as well as the results,
3. Prevention versus inspection,
4. Mobilize expertise of workforce,
5. Fact-based decision making, and
6. Feedback (p. 26).

Total Quality Management has been successfully implemented in educational institutions in the United States (Coate, 1990; Heverly, 1991) and England (Further Education Unit, London, 1991). Coate (1990) indicated that Oregon State University's Physical Plant developed positive attitudes after Total Quality Management was implemented. The institution planned to expand the implementation university-wide in five years. Heverly (1991) stated that Total Quality Management switched Delaware County Community College's Institutional Research Office from trying to perform all functions to performing a "consultative" role. Their administrators and staff were more likely to use the results of their own analyses. After studying various educational institutions, Moore-Norman Vocational-Technical Center,

Norman, Oklahoma (1991), concluded that Total Quality Management was applicable to their institution.

In terms of educational programs, students are the customers. The focus of program evaluations should be students' achievements and the processes which make learning possible. The evaluative results should be used not only to repair current deficiencies but to prevent potential problems from occurring. Teachers, the workforce of education, should be involved and mobilized to take responsibility for quality improvement. Information should be collected by the teachers who teach in the programs; decision making for program improvement should be based on valid information. Positive feedback from superior levels on recommendations made by teachers would encourage them to be continuously involved in program improvement. Since the information for program evaluation is gathered by teachers and only recommendations are submitted to administrators and educational departments, "face" issues are not involved. If "loss of face" becomes immaterial, it will become unnecessary to ask for "favors."

The principles of Total Quality Management are in line with the concepts of decision making evaluation. The six interim steps previously proposed will facilitate the adoption of Total Quality Management. The

implementation of the interim steps appear to be feasible based on the information provided by teachers and administrators. The implementation of Total Quality Management in Taiwanese vocational high schools is problematic because it will involve a major change in management behavior. Adopting Total Quality Management or similar quality-focused approach in Taiwan's industry and business may stimulate the Ministry of Education to do the same.

Summary

The influence of traditional Chinese cultural concepts and personal values seem to block the influence of other possible factors in determining Taiwanese teachers' attitudes toward evaluations. These concepts include face, favor, and harmony. The interactions of face and favor are means to maintain harmony in Chinese society. Under the influence of Confucianism, Chinese place emphasis more on following certain forms than on the meaning of performance. Based on the findings of this study, it may be concluded that teachers view current evaluation practice as ritualistic. To earn high ratings from evaluation results, school administrators display "front-stage behavior"; they may try to manipulate the information presented to evaluators; and

they may try to influence the results by giving favors to evaluators. Because principals and other administrators view evaluation as a summative function and the results as judgment on their career performance, they seek satisfactory ratings of results to save or enhance their "face." The program evaluation methodologies used in Taiwan, which apply the professional judgment approach, need to be improved. The shortcomings of this approach were expressed by teachers, administrators, and evaluators: questionable objectivity, credibility, and "replicability."

It would seem then that the government should confine its efforts to internal evaluation of the curricular standards it has created. However, evaluations are essential activities within the entire process of program development. Most of the participants in this study indicated that the evaluations were necessary. Thus, if evaluations are to direct educational program quality in Taiwan, alternative evaluation methodologies have to be developed and implemented. The alternative evaluation methodologies have to overcome the barrier of traditional cultural influence, such as the concern for "face."

Several characteristics of alternative methodologies suggested by the responses. For immediate implementation, evaluation in Taiwan could start from the

base level of the education system, that is, with the teachers. Teachers may need (1) materials and procedures, (2) help from expert teachers, (3) training, and (4) time to fulfill their evaluation responsibilities. A manual could be developed which contains essential material, such as detailed descriptions of the standards and process. Regardless of the types of methodology implemented, the information collected would need to address specific items in two areas: student outcomes and educational processes. If teachers need help conducting evaluations, senior expert teachers could be the appropriate persons to assist them. Teachers, expert teachers, and school administrators may need training to fulfill their responsibilities in the evaluation process. Teachers may need time allocated to their working schedules so that they would not view evaluations as extra works. Information could be collected by the teachers; then selected information would be passed up to school administrators, regional education departments, and ultimately to the Ministry of Education. The information would be in the form of recommendations for improvements. No criticisms would be made of individual or school performance, therefore the information would not hurt any person's "face."

IV. SUMMARY AND IMPLICATIONS

Summary

The purpose of this study was to explore the factors which may influence Taiwanese vocational teachers' attitudes toward evaluations and the use of their results. Initial analysis of data indicated that the current evaluation in Taiwan is not effective for improving vocational programs. Further analysis of the findings suggested characteristics of alternative evaluation methodologies for short-term improvements. For long-term improvements, the principles of Total Quality Management would be appropriate to incorporate into a new evaluation system.

As indicated in the literature, self-esteem and personality as well as the desire for autonomy may influence teachers' responses to the use of evaluative results. The concept of self-esteem corresponds with the concept of "face" in Chinese society. Traditional personality traits may influence Chinese teachers' responses to the use of evaluative results. Chinese teachers enjoy a relatively high degree of autonomy

within classrooms. They may respond positively to evaluations and the use of evaluative results if that autonomy is not endangered. The attitudes of senior teachers in a group may influence other individual Chinese teachers' attitudes toward evaluations and the use of their results because of their "father" role. Three administrative characteristics--planning, communication, and participation--appear to be interrelated insofar as they may influence Chinese teachers' responses to evaluation. Chinese teachers may respond differently to the qualification of evaluator and evaluation methods. They may also respond differently to the results of different components during evaluations.

Five open-end interview questions were used to collect information. Twelve Taiwanese public vocational high school teachers who had participated in evaluations were interviewed. The responses of 12 administrators and ten evaluators were used as supportive information.

The influence of traditional Chinese cultural concepts seems to overshadow the influence of other possible factors which may affect Taiwanese teachers' attitudes toward evaluations. These concepts include "face," "reciprocal obligation," and "harmony." Teachers' views may also be influenced by Confucianism. These influences may make the evaluation methodologies

currently employed in Taiwan ineffective. Therefore, the initial research question cannot be addressed until the following one is answered: Is current evaluation methodologies appropriate for vocational program improvement in Taiwan?

Evaluations seem to become ritualistic in teachers' views because of the interactions of face, favor, and harmony in Chinese society. Under the disciplines of Confucianism, Chinese place greater emphasis on following prescribed forms than on the purposes of actions. Principals and school administrators view evaluative results as judgments on their performance. In order to earn high ratings from evaluations or to "save face" by preventing the identification of deficiencies, school administrators manipulate the information presented to external evaluators. They also try to influence the results by giving favors to evaluators. Most teachers in this study confirmed that evaluations can improve equipment; otherwise, they felt that evaluations were irrelevant or the results were not useful to them.

Implications

The current methodology for evaluating high school vocational programs in Taiwan is ineffective. The program evaluations conducted by external evaluators at

individual schools do not contribute directly to teachers improving their programs. If the government in Taiwan is to use evaluations to improve the quality of vocational education, it should implement an evaluation system which overcomes the barriers of traditional cultural influence, such as the concern for face, reciprocal obligation, and harmony.

From a long-term point of view, Total Quality Management may be the solution to overcome the difficulties of program improvement in Taiwan; however, certain evaluation practices can be implemented immediately as interim measures. These practices would also facilitate the eventual adoption of Total Quality Management at all levels of the vocational education system.

To involve teachers. From the Total Quality Management viewpoint, students, employers, and technical colleges are customers of vocational high school programs in Taiwan. While improving programs, teachers are administrators' customers. Teachers are the base-level workforce of the education system. To improve the quality of programs' product (students' achievement), this base level has to be "involved" and motivated (Jablonski, 1991). However, the evaluations of vocational high school program in Taiwan mainly involve

external evaluators and school administrators. Teachers are ignored in current evaluations. They are seen as tools to deliver programs to students but not responsible for the quality of their programs. A tenet of Total Quality Management is to make administrators "leaders" rather than "bosses" (Hartman, 1991). Administrators should play the leaders' role during evaluations and then transmit the recommendations for action from teachers to provincial education department. Teachers, rather than external evaluators, are information collectors and the primary users of that information in program improvement. The information collected would be based on the realities of what is happening in programs. The principals and other school administrators should not view their recommendations as judgments on their performance. Therefore, principals and administrators do not have to ask "favors" from external evaluators because they are not concerned with "losing face."

To enable teachers. Total Quality Management emphasizes both product and process evaluations; evaluators should not only "inspect" to identify current problems but, more importantly, to acquire information to prevent potential deficiencies before problems occur. As an interim measure, a clear description of this type of product and process evaluations is presented in the

Professional Technical Education Evaluation Handbook:
Improving Programs in Oregon Community Colleges (Oregon Department of Education [ODE], in review). This handbook is for use by teachers to collect, report, and analyze information. If Taiwan's evaluation is to be conducted by teachers, the materials and procedures in this handbook could be adapted for their use. The materials and procedures indicate that evaluation, planning, and implementation are three essential ingredients of the program improvement process. Program evaluation should focus on both student outcomes and process which enable them to reach their objectives.

Information on impacts and achievements, which are concerned with student outcomes, need to be reviewed annually. After the information has been collected for several years, teachers, school administrators, and program improvement teams should be able to discern trends among students outcomes. Potential problems and the causes for the problems can then be identified and prevented. In addition, processes which include activities, resources, and support functions, should be regularly examined in fixed cycles, such as three to five years. This "comprehensive review" approach (three-to-five-year) could serve as the basis for the identification of potential problems. Any theoretical

construct (e.g., Stake, 1973; or Stufflebeam, 1983) may be used as a foundation for improving vocational education in Taiwan. Taiwanese teachers could readily follow a similar handbook based on any other construct.

In Chinese society, expert scholars are highly respected because of their intelligence and knowledge (Hu, 1960; Latourette, 1964). Therefore, the use of expert teachers to help other teachers conduct evaluations can mobilize them to improve their instruction and programs. Expert teachers and teachers can find and solve deficiencies to improve programs realistically. Through creative communication in teams, Chinese teachers may maintain harmonious working environments.

All teachers and school administrators need training which includes three stages: awareness, orientation, and skills training. The awareness stage should address: (1) what is program evaluation, (2) who benefits, and (3) how can evaluation help you? In the orientation stage, the difficulties of conducting evaluations should be presented realistically. During this stage, faculty should receive a handbook which describes the standards and procedures that they are going to use. The skill training stage takes the most time, and teamwork training is the core of this section. Teamwork training should

include learning how to gather, analyze, and report information and to make decisions; these actions are essential activities of program evaluation (Stufflebeam, 1983).

Expert teachers and administrators need additional training on their responsibilities and roles. They need to learn technical and non-technical skills, such as interpersonal communication, leadership, problem-solving, goal awareness, use of technical tools, and group dynamics theory.

The time spent on training and evaluation should be taken into consideration. Thus, teachers would not view evaluations as extra work. To allocate time for teachers to do new duties means to reduce their teaching workload. In turn, cost would be increased because additional teachers would be needed to share the teaching responsibilities.

To pass up fact-based information from teachers. A free atmosphere which encourages teachers to discover actual and potential deficiencies in their programs by themselves is essential. The information gathered through teamwork would be based on what really happens. This information would be in the form of recommendations for overall program improvements. These improvements should be for solving current, or preventing potential,

program deficiencies. Every level of administrators should give feedback to their subordinate organizations (Ishikawa, 1985; Jablonski, 1991). Because teachers' weaknesses would not be uncovered by others during evaluations, teachers do not have to be concerned with "losing face," and no manipulation of information would be necessary. Therefore, what decision-makers receive and use to make decisions would be fact-based recommendations. In addition, the feedback provided by every superior administrator would encourage subordinates, especially teachers, to be continuously involved in and contribute their efforts to program improvement.

The evaluation of high school vocational education programs in Taiwan is currently based on American evaluation theories; however, their applications do not sufficiently recognize the strength of Chinese cultural beliefs and practices. Evaluation can serve as a means for improving the quality of programs if teachers are empowered through their involvement and by increasing their capacity. However, evaluation is only an interim step; implementing Total Quality Management, which employs many contemporary evaluation concepts and practices, should be the eventual goal.

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APPENDICES

Appendix A

Chinese Translation of the Research Questions

台灣職業教育教師將評鑑結果運用於課程改進之研究

訪問問題

本訪問主要目的在於蒐集有關影響職業教育教師使用評鑑結果之因素的資料。所有訪談內容都將為其保持機密。

訪問高職教師問題

- 1 您所參與過的評鑑內容及過程為何？
- 2 教師們對評鑑的感覺如何？
- 3 評鑑委員是由誰擔任？您對他們的感覺如何？
- 4 要如何鼓勵教師參與評鑑？
- 5 您的年齡？教育背景(學歷)？及教學經驗為何？

訪問評鑑委員問題

- 1 您所參與過的評鑑內容及過程為何？
- 2 您覺得學校中的教師與行政人員對評鑑之反應如何？
- 3 對於評鑑之改進，您的建議為何？

Appendix B

Subject Informed Consent Agreement:

English and Chinese Translation

Subject Informed Consent Agreement

Please read the following before signing:

The primary purpose for this research is to identify the factors which may influence the vocational instructors' use of evaluative results. Participation in the study is strictly voluntary. The expected duration of each subject's participation is about two hours. Information will be gathered through a personal interview. There are no foreseeable risks for the study's subjects. Procedures will be applied to insure confidentiality for all participants.

I have read and give my informed consent to participation in this study:

Name of Subject

Date

Questions about this research can be directed to:

Chung-ta Yeh
No. 3, Lane 89, Sze-Wei Rd.,
Hsin-Chu 30029
Taiwan, R.O.C.
(035) 246566

研究對象參與研究訪問同意書

請仔細閱讀以下內容，並簽名於下方線上：

本研究之主要目的在於蒐集有關影響職業教育教師運用評鑑結果之因素。參與本研究完全是自願的，每一位研究對象所使用時間約二小時。本研究以私人訪問方式蒐集資料，對受訪者沒有任何危險或傷害。整個研究過程並將保證為受訪對象保密其受訪內容。

本人已閱讀過以上內容，並同意參與此研究

研究對象姓名

日 期

如果對於本研究有任何問題，歡迎與本人聯繫：

葉忠達

新竹市30029四維路89巷3號

電話：(035) 246566