Educational Climate in Elective Adult education: Shared Decision Making and Communication Patterns

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Abstract:

Educational climate represents the social and contextual qualities of an organization as perceived by the participants. The theoretical construct of educational climate encompasses a range of variables which have been categorized as ecology, milieu, social system, and culture (Tigiuri, 1968). These categories are similar to the elements of the andragogical process described by Knowles (1984). In this research, the theoretical climate category of social system emerged as influential in an ethnographic study of an elective university program. Findings revealed that shared decision making and communication patterns were instrumental in the quality of the adult learning experience.

Article:

Researchers studying educational effectiveness in traditional school settings have long acknowledged certain characteristics which contribute to student achievement. Components related to curricular and instructional planning, teacher and student behavior, and student attitude have been addressed extensively in the educational literature (e.g., Gage, 1978; Rosenshine, 1979). Rosenshine (1979), for example, characterizes effective classrooms as those employing direct instructional techniques such as teacher control of content and space, immediate focused feedback, and frequent monitoring of student performance.

Other researchers have looked beyond instructional components to identify social and cultural variables which contribute to the overall educational environment. These variables have been conceptualized into models of an affective construct termed educational climate (Getzel & Thelan, 1960; Moos, 1974; Tagiuri, 1968). Climate is a component of the total environmental quality within an organization. In an extensive review of literature, Anderson (1982) has described the current status of school climate research and the theoretical and methodological problems involved in the delineation of this construct, A similar review by Randhawa and Fu (1973) has focused primarily on classroom climate variables.

Most climate research has been conducted within elementary and secondary programs. Only two studies were found which investigated social climate in adult education settings. Darkenwald and Gavin (1987) examined the influence of social climate on dropout behavior, while DeYoung (1977) investigated the effect of climate on class success at the university level. The extent of the omission of climate as a variable in adult education research is surprising when one considers the potential impact of the educational environment in the attainment of content proficiency (Knox, 1980), self-directed learning (Brookfield, 1986; Spear & Mocker, 1984), and andragogical theory (Knowles, 1970).

While it is a simple matter in climate evaluation to calculate student-teacher ratios or to survey teachers to determine their years of experience, it is much more difficult to map social systems and belief structures which play a major role in student and teacher perceptions of climate (Tagiuri, 1968). In these latter instances, it is the nature of the communication and interaction which determines the quality of the educational environment. One

research paradigm which has proven especially revealing in the study of this process is ethnography. The focus of the research is on the description of the cultural community. In educational research, schools and classrooms are viewed as communities which include many of the organizing structures which occur in social or cultural groups. The methods associated with the study of cultural communities seem particularly appropriate for the study of the group interactions which form the construct of educational climate.

The purpose of this research was the examination of components of climate theory which influenced the quality of the learning experience in an elective program for university adults. The ethnographic study was conducted by a team of eight investigators. Each investigator examined climate within a single university course over eight class meetings. The data from the microethnographies were consolidated to describe pervasive climate variables within the program investigated.

Table 1

Comparison of Educational Climate as Presented by Tagiuri and Knowles

Tagiuri's Taxonomy (1968)[a]	Knowles Elements of the Andragogical Process (1985)[b]

1. ECOLOGY
—building characteristics
	1. CLIMATE SETTING
	  a. Physical Environment
	    —classroom arrangement and decor

2. MILIEU
—teacher and student characteristics and morale
	b. Psychological Environment
	    —mutual respect
	    —collaborativeness
	    —mutual trust
	    —supportiveness
	    —openness and authenticity
	    —pleasure
	    —humanness

3. SOCIAL SYSTEM—relationship among key participants —rapport/communication —shared decision making —opportunity for participation	2. INVOLVING LEARNERS IN MUTUAL PLANNING 3. INVOLVING PARTICIPANTS IN DIAGNOSING THEIR OWN NEEDS
4. CULTURE—values and belief systems which hold meaning for participants —teacher commitment —cooperative emphasis —academic emphasis —expectations —consistency/clarity of goals	4. INVOLVING LEARNERS IN FORMULATING LEARNING OBJECTIVES 5. INVOLVING LEARNERS IN DESIGNING LEARNING PLANS 6. HELPING LEARNERS CARRY OUT LEARNING PLANS 7. INVOLVING LEARNERS IN EVALUATING THEIR LEARNING

[a] Sub-categories in the Tagiuri taxonomy were derived from Anderson's (1982) classification of climate variables.
[b] Knowles, 1984, pp. 14–18.

EDUCATIONAL CLIMATE

According to Tagiuri (1968), a taxonomy of environmental climate consists of four major components each with a group of interrelated sub-elements. Central to the construct are the components of ecology (characteristics of the building or classroom), milieu (characteristics of individuals), social system (patterned relationships of persons and groups), and culture (belief systems, values, cognitive structures, and meanings). The conceptualization of the climate construct in Tagiuri's taxonomy, presented in the left column of Table 1, is considered superior to other conceptualizations because of the breadth of definition (Anderson, 1982).

Tagiuri's proposal conceptualizes a broad construct represented as a composite of variables nested within the ecology, milieu, social system, and culture aspects. The ecology variables which include building characteristics and school or class size are among the easiest to measure of the climate variables. However, studies examining these variables have produced inconclusive results when student achievement functioned as the dependent

variable (Phi Delta Kappa, 1980; Rutter, Maughan, Mortimore, Ouston, & Smith, 1979). The milieu component is composed of student and teacher characteristics and morale, Learner characteristics include demographic data such as age, sex, and socioeconomic status. Teacher characteristics include salary, years of experience, and hours of preparation. Objective measures of these variables have shown little relationship with student outcomes (McDill & Rigsby, 1973; Rutter et al., 1979). The social system category focuses on relationships among administrators, teachers, and students. Variables of rapport, communication, shared decision making, and opportunity for participation are typically investigated (Walberg, 1968; 1969a; 1969b; 1969c; Walberg & Anderson, 1968). Cultural variables within Tagiuri's taxonomy represent values and belief systems which hold meaning for the participants. Variables of teacher commitment, expectations, rewards and praise, consistency, clear goals, and emphasis on academics are among those with the strongest empirical relationship to student achievement (McDill & Rigsby, 1973; Phi Delta Kappa, 1980; Wynne, 1980). Other cultural variables such as peer norms, consensus among participants, and a cooperative emphasis have also been investigated with positive results (Coleman, 1961; Rutter et al., 1979; Wynne, 1980).

Investigations are continuing to identify variables which interact to create a school or class climate. When these variables are examined within adult or continuing education classes, the search for effective climate becomes even more complex. Knowles (1972, 1984) has emphasized the importance of climate in creating an effective environment in which to pursue the andragogical model of adult education. He divides climate concerns into physical and psychological. His description of the former is similar to Tagiuri's category of ecology, while the latter represents variables which fall primarily within the milieu category. Table 1 represents a comparison of the categories in the Tagiuri taxonomy with Knowles' description of elements within the andragogical process. It is interesting to note that elements in Knowles' (1984) andragogical process design appear similar to the Tagiurian categories of social system and culture. Knowles' emphasis on involving learners in the selection of content, instructional methods, and evaluation strategies (Table 1, Knowles #2, 3, 4, 5, 6, 7) are de-scribed by Tagiuri within the social system category (Table 1, Tagiuri #3). Knowles' description of the psychological environment (Knowles # lb) is elaborated by Tagiuri within the social system and culture categories (Tagiuri #3, 4). In most settings, the ecology or physical environment variables (#1 both models) are within the control of the teacher (Vosko, 1984). It is the social system and culture variables within the Tagiuri taxonomy which are most elusive and perhaps most potent in Knowles' concept of andragogical process.

METHOD
Design
To analyze the influence of social system and culture variables on the participants' perceptions of learning, microethnographic studies of eight courses were conducted. The studies were designed within the symbolic interactionist paradigm (Jacob, 1987) and were conducted to describe the participants' interpretations of their experiences within these courses. The symbolic interactionist tradition within qualitative research is responsive to both the conscious perceptions of participants as reported in interviews and the unconscious meanings that participants assign to events and interactions as observed by the investigator. The rationale for the use of this methodology in a study of climate was based on the assumption that young adult students are active participants in the learning environment, and thus both determine and respond to climate. The investigators sought to determine which variables or patterns of variables were most influential in the participants' perceptions of quality adult education.

Traditional ethnography relies on long periods of field work to examine social units within tribes or societies. These studies contribute to an understanding of group values and behaviors. Researchers attempt to discover the elements, patterns, and relationships which interact to distinguish the particular social unit. Educational ethnographies (Goetz & LeCompte, 1984) expand this focus to educationally relevant issues and concerns. When research is conducted within an ethnographic design, a single investigator typically spends an extended period of time studying the social units or sub-units within a school. Microethnography as described by Treuba (1981) involves brief, but intensive periods of data collection using observation and interview. In the microethnographic studies reported here, a random stratified sampling procedure was used to select courses representing a range of program offerings. Additional attempts were made to increase the objectivity of the

study and its relevance to the total pro-gram by utilizing eight investigators, each with a particular course responsibility. A period of eight class meetings was selected for observation to minimize the effects of change. No attempt was made by the investigators to project climate factors beyond those actually observed or discussed by the participants.

Courses and Subjects

The study was conducted in eight courses within the physical education elective program at a large midwestern university. Courses observed included skills and fitness topics which involved a cognitive as well as a psychomotor component. None of the courses was required for graduation; thus, enrollment was voluntary, The courses were taught by both university staff and teaching assistants and ranged in size from 15 to 25 students, Twenty-five percent of the students were 23 years of age or older. Fifty-two percent were juniors or seniors, while an additional 12% were graduate students. The students were equally divided between males and females, Sixty-two percent of the students reported their grade point average to be higher than 2.8 on a 4 point scale.

Evans (1987) has argued that the needs of young adult learners in the 18-25 age group have been ignored and "remain relatively unstudied" (p. 335). Young adults in this age group are just developing the lifestyle habits which influence their patterns of adult behavior. Research findings applicable to students in this age group and education level are critical to the understanding of adult learning. Patterns of self-responsibility for learning and expectations for self-initiation are developed during secondary and postsecondary educational experience. Careful monitoring of students' attitudes toward education should begin during this critical time period.

Data Collection

In order to establish a common set of protocols for the investigation, five training sessions for the research team were conducted prior to the data collection. Sessions continued on a weekly basis throughout the data collection period and as the results were analyzed. A total of 14 sessions were attended by the research team, Data were collected in three domains described by Goodlad, Klein, and Tye (1979). These domains represented perspectives of key participants and provided a standard of consistency for consolidation of results across the eight microethnographies.

The first domain represented the instructor's perceptions of personal efforts to establish a particular climate and the students' responses to that climate. This domain also included the instructor's perceptions of the role of the administration in the development and maintenance of program climate. The second domain focused on the experiences of students. These consisted of perceptions of interactions with peers and the instructor.

Data in both the teacher and student domain were collected through informal and formal interviews (Spradley, 1979). Formal interviews with teachers focused on four major themes: (a) rationale for class organization, (b) the originator (administrator-teacher-student) of course decisions, (c) description of student needs and interests, and (d) analysis of class experiences considered most relevant for students. Student interview questions addressed five topics: (a) level of previous experience with the course content, (b) personal goals for enrolling in the course, (c) nature of teacher and peer interactions, (d) evaluation of course relevance, and (e) perception of necessary components of a rewarding course experience. Actual interview questions are available from the first author.

The third domain consisted of written descriptions of each class compiled by the researcher assigned to observe that course. Each researcher recorded extensive field notes of class events and interactions. Data included descriptions of student and teacher behavior, course content, and class management procedures. The observation procedure described extensively by Patton (1980) and others was employed throughout the data collection period. Observation protocols followed a strict non-participant observer format. Researchers did not engage in course experiences, nor did they interact with students during the instructional time. They were instructed to change their primary observation location for each of the eight observations in order to view the class from as many perspectives as possible.

Data Analysis

Data were analyzed using the procedures of constant comparison (Glaser & Strauss, 1967) and typological analysis (Goetz & LeCompte, 1984). Constant comparison is an inductive process that occurs in roughly four phases: (a) comparing incidents and generating categories, (b) integrating categories, (c) delimiting the emerging theory, and (d) writing the theory. In the first phase, each of the researchers conducting this study analyzed the field note and interview data to identify common elements or examples. Similar examples were then grouped and rescanned in an integrative process to detect common properties. In the third phase, properties were compared across categories and participant domains to test for the integrity of group membership, thus delimiting the emerging theory. Typological analysis was used during this step to compare the emerging categories with the classifications of the Tagiuri model.

The model category of social system was found to be useful in the classification of field notes and interview data. Once the first three phases of the data analysis were completed by each researcher, the results from the various microethnographies were consolidated. The three-step process was repeated in its entirety to discern those categories and properties with sufficient evidence to be considered for theory development. Only variables which were independently verified across courses and across participant domains were considered in the fourth phase of the constant comparison analysis (writing the theory) and included in this article.

RESULTS

When data were compared with the Tagiuri taxonomy, the social system category was found to play an influential role in the quality of the adult learning experiences. The variables of shared decision making and communication were found to be most influential across the eight courses investigated.

Shared Decision Making

Shared decision making took several forms within the social system of the courses examined. Decision making involved curriculum judgments related to content which would be included within the course and instructional decisions to determine how content was to be presented and practiced. In shared decision making situations, either the participants decide jointly on a plan or solution, or the individual controlling the situation gives the authority for the decision to a designated person or group. In either instance, the managing individual has the option to maintain control of the decision or to reassign it. In this study, the decision-sharing dyads or participant pairs consisted of administrator-teacher and teacher-learner. The teacher was in a pivotal position in these relationships, serving in both the responding role of the administrator-teacher dyad and the initiating role in the teacher-learner dyad. Thus, the teacher was the beneficiary of the shared administrator-teacher decision and the benefactor of the shared teacher-learner decision.

Administrator-Teacher Shared Decision Making Dyad

In the courses examined, administrators had attempted to make the course syllabus consistent across each content area. Therefore, all students taking aerobic conditioning, for example, would receive essentially the same content, regardless of the instructor. Some teachers, however, reported that administrative structuring of much of the content limited their ability to become involved in content selection. They believed that they had been employed to teach the course because of their knowledge and previous training. However, their skills were utilized only in the instructional presentation, not in the selection of specific content.

Teacher-Student Dyad

Observers noted that teachers rarely shared responsibility for decision making with their students. This may have been due to the fact that teachers, them-selves, had been given few content decisions by program administrators and therefore had few to share. Teachers did share class management decisions with learners. These primarily involved decisions such as where and with whom students could work. The observers reported that students were frequently allowed to select a partner or to decide in which part of the facility they wished to practice. Instructional decisions related to selection of teaching methodology were not shared with learners. Teachers in the courses examined usually delivered content in direct teacher-centered styles encouraging learners to "do it like this" or "practice *this* on your own for five minutes." Rarely were students consulted

regarding the method in which they would prefer to learn. Most students did not object to this format, usually acknowledging that the instructor was the expert. Those who did request different or additional topics or questioned the relevance of a task were usually older, non-degree students. This suggests that the direct teaching styles that are pervasive throughout traditional education continued to be accepted by these university students.

Communication Patterns
Communication patterns were central to the development of a comfortable and supportive social system for the young adult learners in this study. Three communication dyads were documented: teacher-learner, learner-learner, and teacher-teacher.

Teacher-Learner Communications
These were categorized into three groups: (a) the teacher and the whole class, (b) teacher with a small group of students, and (c) teacher and the learner isolated in some way from the class. When the teacher communicated with the class, non-content related discussions usually involved teasing or joking. Frequently, the teasing was directed toward one student, with the remaining class members allowed to participate. In all of the instances observed, the teasing was described by the researcher as positive in nature, with no one appearing to take offense. It is interesting to note that most teasing occurred between a teacher and learner of the same sex. When one instructor was asked about this in the interviews, he expressed a concern that teasing of an opposite-sex student may be misconstrued. The instructor described same-sex teasing as a way in which he could create a less formal atmosphere while not offending students. Students seemed to appreciate the attention given to them and did not report negative feelings from these encounters.

Teachers also promoted communication by expressing empathy for individual learner concerns. Many of the classes observed involved strenuous activity which resulted in muscle soreness, fatigue, and sometimes minor injuries. Students were particularly appreciative of teacher comments regarding these problems and mentioned them during interviews. Teachers, in turn, felt it was a way to humanize the sometimes impersonal coursework content.

Learner-Learner Communications
While this form of communication was of importance to the students themselves and was documented by the course observers, teachers did not refer to student interactions during the observation period. When teachers were asked to describe student interactions in interviews at the conclusion of the study, most believed that peer interactions occurred naturally within most class structures and did not require specific planning. Observers and students, on the other hand, reported several instances where peer communications were limited by the student or class organization. For example, several instructors paired students by ability. When this procedure was used over the majority of class meetings, it greatly limited the potential for interactions to occur. Peer interactions were mentioned frequently in student interviews, regardless of the content of the course. Students indicated that one of the reasons they had enrolled in the course was to make new friends or to meet new people. Opportunities to meet different people were more important for some students than mastering content.

Teacher-Teacher Communications
This communication form was observed when two of the same courses were scheduled consecutively in the same facility. During this brief period, when one course was ending and the second course beginning, instructors had the opportunity to compare goals, discuss problems, and generally commiserate with someone who shared a similar experience. The empathetic teacher-teacher relationship could be documented only when this scheduling allowed. However, it was evident in this research that the resulting teacher satisfaction had a potential impact on climate for students in both of the adjacent classes.

DISCUSSION
Shared decision making and communication patterns played an important role in this elective program for adult learners. An examination of the findings across classes suggested that the common underlying element essential

to both was a sense of mutual trust. As Knowles (1984) has asserted, a positive psycho-logical climate nurtures mutual trust and respect—key elements which facilitate student involvement. In this research, the absence of mutual trust contributed to a concomitant lack of shared decision making. This setting was somewhat unique because of administrative control which limited decisions shared with teachers. Researchers in other settings are encouraged to investigate beyond an apparent lack of teacher-learner sharing to determine if teachers are free to involve learners in decisions to related curriculum planning. Shared decision making between administrators and teachers provides beneficiaries with a sense of ownership contributing to teacher commitment, while sharing decisions with learners places more of the responsibility for learning with the student. Efforts to reconceptualize staff development and teacher education to empower teachers and students to take responsibility for their own teaching and learning continues to receive greater acceptance through the efforts of Apple (1979), Giroux (1981), Jackson (1980), and others.

The results of this research suggested that program administrators maintained ownership of the scope and sequence of the curriculum while sharing decisions regarding instructional methodology used to implement the content. Teachers, in turn, shared primarily class management decisions with their students. Most of the literature regarding shared decision making and andragogical theory in adult education limited the definition to teacher-learner sharing (Davenport & Davenport, 1985; Knowles, 1972; McKenzie, 1979). However, in the courses investigated in this research, teachers owned few content decisions that could be shared.

The importance of mutual trust was also evident in the establishment of communication patterns within the social system. Administrator-teacher, teacher-learner, and learner-learner rapport appeared critical to the development of an educational climate that promoted effective skill development. Rapport created by open and fluid communication patterns appeared to be a facilitating factor in shared decision making. Successful efforts on the part of administrators and teachers to increase levels of mutual trust have been reported by Vyskocil and Goens (1979).

In this study, learners reported that an openness on the part of the instructor increased their desire to discuss problems or topics of interest. Moreover, they indicated that these discussions expanded their understanding of the content and assisted them in placing the information within a relevant context in their own lives. However, the rapport between learners was found to be incidental. Learners reported that class structures limited their access to other class members because of instructor-designed groupings. It was evident from inter-views that teachers were unaware of problems associated with rapport between students. Petillon (1983) has proposed a model for student interaction based on two situational determinants: competence and interpersonal orientation. Within this model students select, accentuate, and organize information about other students, and then draw conclusions which structure future interactions. The model has been instrumental in the development of a classification system which can be used as a diagnostic tool to study student interactions.

IMPLICATIONS FOR STAFF DEVELOPMENT

The quality of the adult educational experience can be defined by both academic and educational climate variables that affect student responses to learning. Staff development to increase shared decision making can provide administrators and teachers with the knowledge necessary to structure the educational setting to provide alternatives. Once the techniques have been mastered, decision makers may be willing to trust participants to make quality decisions consistent with mutual goals.

Administrators in large programs are frequently unwilling to share curriculum decisions with instructors. Among the reasons for this hesitancy are a lack of staff experience with curriculum decisions, a belief in a single best set of topics that must be included in the course, or a need to ensure that all students complete a course with a uniform set of skills or knowledge. Frequently when one is teaching a course within a limited time frame, the number of relevant topics far exceeds the time available. Administrators may circumvent these concerns by designating several sets of topics which can be selected by the teacher based on personal interests and expertise. Teachers may also be encouraged to invite students to assist in content selections based on their previous experience, interest, and ability level. The compromise of requisite topics plus optional content may

satisfy the administrator's requirement for uniformity and accountability, while accommodating the individual needs and interests of both instructors and students.

Learning to assume responsibility for decision making is a process that frequently must be taught to adults dependent on teacher-centered instruction. Staff development to teach instructors these skills may be prerequisite to the decision-sharing process. Workshops can be designed to introduce staff to the variety of options available when sharing planning and instructional decisions with students.

Tracy and Schuttenberg (1986) have suggested five approaches to planning for teacher-learner interaction that reflect Knowles' (1984) elements in the andragogical process. These may be conceptualized as a continuum from instructor-centered to learner-centered planning, When sharing instructional decisions with students, the teacher may initially choose to maintain total control of the setting. This is especially appropriate in a setting where safety is a concern. Only by following a tightly structured set of directions can students complete the task safely.

With less hazardous content, the teacher may begin the decision-sharing process by inviting students to select from a limited set of content options. For example, the teacher structures two or three experiences which reflect different topics or different ways of practicing a given topic. The student is then encouraged to select the one that is most relevant or useful. This can be made more demanding by challenging the student to choose from several tasks at varying levels of difficulty. To be successful, students must accurately assess their own ability level and select an appropriate task.

As students learn to function effectively within these parameters, the teachers limit their own involvement to setting criteria for the solution of a problem. Students are then free to solve it using many different strategies, The next step invites students to set the criteria for solution. Criteria are selected from appropriate alternatives based on an understanding of the problem and a personal assessment of their ability levels. The ultimate experience occurs when students are able to create the entire experience, manipulating ideas of equipment to generate content knowledge without the benefit of teacher structure (Torrance, 1979). With each option, students are able to share or control more of the course decisions. In this way, students are encouraged to select tasks which are relevant and meaningful to them within their life experiences (Knowles, 1972; Lam, 1985; McKenzie, 1979).

In this study, the young adult students trusted the instructor to be the expert. They were quite satisfied to let "the instructor do the decision-making work." Similar results were found in a study by Tracy and Schuttenberg (1986) which examined adult learners' preferences for involvement in curriculum decision making. Categories labeled "Instructor knows best," "Instructor should be authoritative," and "Students need structure" received 39.1% of the responses from a population of learners with a mean age of 34.8 years, and 59.3% of responses for learners 60 years of age and older. By gently increasing the number and variety of shared decisions, the instructor can assist the student not only in learning and accepting the responsibility for the process but also in valuing the *ownership* of the product. The opportunity to share in the decision making at the content level contributes to the immediate goal of course relevance while advancing an ultimate adult education goal of lifelong self-directed learning.

The educational climate construct can be used to structure and study climate in a variety of adult education settings. Further delineation of the patterns and relationship among these variables can lead to concrete strategies to further the andragogical process. Additional research is required to determine optimal methods for decision sharing and participant interactions within a variety of adult settings. Adult education programs which monitor both instructional and climate variables can provide a holistic experience which addresses the lifelong learning goals of students.

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