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SELF-MANAGED LEARNING: AN EXPERIENTIAL COURSE DESIGN USING THE QWL PARADIGM

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ABSTRACT

The purpose of this article is to suggest ways of improving satisfaction, performance, and motivation of students by analyzing classrooms as work organizations according to QWL concepts. This paradigm, referred to as self-managed learning, requires the student to take more of an active responsibility in his own learning. Through the use of group exams and projects, peer evaluation, and a participatory mode of decision-making concerning course format, students tend to be more motivated, attend class to a greater degree, develop higher levels of conceptual and analytic reasoning than may be the case in traditional forms of education.

Introduction

For the past several years quality of work life (QWL) has received considerable attention in organizational behavior literature. For the most part, the research has indicated that QWL interventions can be very successful not only in increasing job satisfaction and motivation of employees, but also in raising organizations' likelihood of attaining goals (Jenkins, 1981; Trist, 1981; Cummings and Malloy, 1977).

The QWL concept has significant implications for higher education, which may be seen as an institution which socializes its members into a particular type of organizational paradigm. More than anything else the rapid increase in QWL and self-managing forms of organization in American enterprises indicates the emergence of a new, more viable organizational design. If this trend continues we can expect in the future that American business will increasingly require workers with the skills, attitudes, and psychological disposition necessary to work in autonomous groups and other more self-managing organizational forms. QWL means that the basic building block in organization design is the group rather than the individual. Multi-skilled developmentally-oriented groups will replace enlarged but largely dead-end individual jobs.

This trend in the business world, and the new concepts of organizational design on which it is built, has important implications for education, especially higher education. Just as organizations have discovered the benefits of semi-autonomous work groups as a means of improving the quality of work life, it is likely that similar practices applied in the classroom can also improve the quality of educational life.

It can be argued that the main thrust of QWL is to enhance the ability of human systems to learn from their own experience and to change their own organization on the basis of what they have learned (Williams, 1982). Many educators would agree, at least in theory, that that theme would also apply in higher education; in this case changing the organization refers to students having a say in the process of how they learn. However, most teaching is not designed around a QWL paradigm. Education has been viewed primarily as an individual, not group-based experience, and

traditional

methods of classroom instruction are exemplified by hierarchical authority expressed in tight faculty control over students. The instructor makes all decisions regarding course content, grading, learning pace, etc. In general, it is believed that students lack the skills and discipline necessary to design and manage (or at least co-manage) their own learning environment effectively. Thus, there appears to be a contradiction. Educators frequently discuss the problems associated with the lack of initiative on the part of students (similar to managers expressing "theory X" philosophies in the workplace), however, they often structure their learning environment to encourage passivity. An alternative to traditional education is the more self-managed learning environment; that is, an approach that utilizes theories of QWL and self-managed forms of organization.

The purpose of this article is to suggest ways of improving satisfaction, performance and motivation of students by analyzing classrooms as work organizations according to QWL concepts. This is accomplished by integrating an innovative educational format (Michaelson, Watson and Fink, 1982), an experiential learning model (Kolb, Rubin, and McIntyre, 1984), and the concept of the classroom as an organization (Cohen, Fink, Gadon, and Willits, 1984) with a theory of work systems design, such that the relationship between higher education and learning by employees in the workplace can be viewed as a similar process.

Implementation of Team Learning

Learning in small groups relies on the extensive use of permanent, heterogeneous, five to seven member student work groups to accomplish learning objectives. The prominent features of team learning include: 1) the development of basic conceptual skills through an instructional activity sequence of individual and group pre-instructional exams with immediate feedback; 2) mini-lectures to alleviate deficiencies identified by the exams; 3) extensive use of cases, simulations and experiential exercises to provide students with the opportunity to develop the ability to apply course concepts; and 4) Grading based on a combination of individual performance, group performance, and peer evaluation (Michaelson, et al., 1982). Although items 1) and 2) described above are not specific components of STS, the attempt here is to integrate the team learning concept with STS to create a comprehensive, relevant learning model. The team learning/autonomous work group model is summarized in Table 1. This section of the article describes how the team learning methodology is implemented along the lines of autonomous work groups described above.

A significant, meaningful, whole task. Exams, quizzes, experiential exercises, cases and projects are activities that can be conducted in a group problem solving format. Given the appropriate subject material prior to the instructor's discussion of the topic, students come prepared to class to interact

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with colleagues around specific learning points. For example, students may be asked to read text or handout material regarding leadership styles and prepare an instructor-selected case (dealing with leadership) for the next class meeting. At the following session, teams meet at the beginning of class to discuss the case and respond to assigned questions. Randomly selected teams may then be asked to present their conclusions to the entire class. The learning process takes place in the group and in the interaction between the groups; the instructor's role is that of facilitator, not lecturer.

In the case of a quiz, students, once again, take the test prior to discussion of the material by the instructor. The quiz is given, first, on an individual basis, but upon completion, students meet with their teams and take the same quiz in groups. The group quiz allows team members to exchange information and understanding of the subject material. Therefore, the majority of learning is a self-managed, team process, not an instructor-based lecture.

The key point of the model is the shift in responsibility from traditional forms of education. Rather than being note-takers of instructor lecture, students are required to come prepared before a lecture is presented (in fact, with the exception of mini-lectures to synthesize learning points, no instructor lecture is needed in a team learning classroom) if they wish to do well on the quiz. In this learning model students are given the opportunity to do a significant, meaningful whole piece of work through quiz preparation (or case, experiential exercises, etc.), and utilization of group process to clarify understanding of the material, rather than putting the responsibility on the instructor to explain initial concepts. Mid-term and final exams can also be handled in a similar manner.

Peer evaluation is another technique that allows group members to engage in a whole piece of work. By evaluating the other team members, the inspection and control phase of the learning process is accomplished by students, rather than the instructor. The peer evaluation process associated with team learning also reinforces the likelihood of participation of groups members. Students evaluate colleagues in their group at the end of the term. The criteria for appraisal of performance is established by each group (which enhances autonomy and responsibility) at the beginning of the term.

At the time of evaluation, students are given the following instruction: Each individual will rate all of the other members of their group. Individual peer evaluation scores will be the average of the points they receive from the other members of the group. Raters must differentiate, however, in their ratings. That is, each rater must give at least two scores that are different than the remaining members receive. (Instructors are advised to assign a specific number of points, e.g., 50, to be allocated by each student when evaluating others.)

The appraisal process provides incentives for students to come prepared and actively participate in discussions. By requiring differentiation on peer evaluation, instructors encourage students to distinguish between performance levels, and eliminate the potential of individuals grading team members with identical scores.

High skill level of group members. Obviously, the instructor has little, if any, power with respect to selecting students to enroll in the course. One can assume, however, that students enrolling in an upper division undergraduate or graduate level OB course are likely to possess the academic skills necessary to reach that position. However, cross training, as indicated in the autonomous work group model, is another way of expanding skill of group members.

By establishing heterogeneous teams (along lines of gender, ethnicity, grade point average, pre-tests of learning style, etc.), instructors are able to group students with a wide variety of viewpoints and different learning and interaction styles. Teams consisting of members with diverse experiences and backgrounds may increase learning in areas such as negotiation skills, conflict management, and provide fresh insights for students in the assimilation of new concepts. In addition, instructor-selected versus student-selected groups have less likelihood of containing members with previous friendships which can impede the development of group cohesiveness (Michaelson, et al., 1982).

The use of permanent rather than ad hoc learning teams allows groups to harness forces in ways not possible when meeting on a short-term basis. Groups are more likely to become cohesive with time, which, in turn, may have a major impact on both the attitudes and behavior of their members. It has also been shown that heterogeneous groups have high creative potential when they have the opportunity to develop into effective problem-solving entities (Thibaut and Kelley, 1969).

One of the major benefits of team learning is the opportunity students have to work in an interdependent environment. For many it is their first experience in working with others over an extended period of time on task-related activities. The collaboration and consensus-seeking that is required allows students to gain greater insight into their own personality as well as recognize differences in motives and decision-making styles of others. The group also becomes a training ground for dealing with interpersonal conflict in task settings. Disagreement relating to problem-solving is a common occurrence among group members. Conflict resolution can be discussed, not only in a theoretical sense, but can be applied in actual situations as differences in opinion and decision making emerge.

Autonomy/Responsibility. Team learning allows students to be involved in decision making regarding grade structure and course content, and also gives them the opportunity to express disagreement with instructor evaluation. Within the first or second week of the term groups meet to discuss the weighing of individual versus group grading. (It is useful to establish a range, e.g., 20% minimum, 50% maximum for group-based grades.) Each group in the class elects a representative to meet with other group representatives to share ideas about the grading decision. Representatives then return to their groups and a vote is taken. The majority group decision determines the grading structure for the class.

Students participate, in a similar fashion, in the determination of course content. Obviously, students' limited knowledge of the subject matter restricts their ability to determine appropriate topic material; however, a broad design can be established. For

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example, learning categories such as theory, management skills, experiential exercises, etc., are more easily discerned by students. These categories can be weighed as to preference. (Once again, it is useful to establish a range that is acceptable to the instructor.) The ability to have a say in the grading and content of the course may allow students to feel a sense of freedom in the design of procedures, and an ego involvement in the decisions that are made. Participation in structuring the class may become a critical ingredient in the development of commitment to group and course goals.

As described earlier, students take quizzes both individually and in the group, prior to discussion of the material in class. The active role of the student is strengthened through peer pressure, because the incentive to come prepared is high. The group quiz places considerable responsibility on the student-he/she is not only accountable for his/her own work, but recognizes the importance of being a resource to team members.

Responsibility for learning is further encouraged by an appeal process. Upon the completion of a quiz, if a team disagrees with the instructor's answer they can submit a written appeal describing their reasons for disagreement and indicate what they believe is the correct answer. This procedure reinforces learning points by having students explain more clearly their reasoning supporting their solution.

Group rewards. Although the final grade for the student in a team learning classroom is a combination of individual and group performance, the primary learning point, empowerment. In the classroom, is developed by the dynamics of working in a team. Collaboration among group members is one of the main strengths of team learning. The willingness of students to come prepared and work closely with colleagues in developing understanding of material is a critical factor in the shift from passive attendance to active responsibility for learning. The incentive to cooperate with team members is threefold. First, a large part of the final grade is determined by group performance. Therefore, students recognize the value of being an involved participant in team decisions. Second, peer evaluation, where group members complete performance appraisals on one another, acts as a stimulus to maintain active involvement. Finally, a student's intrinsic need for personal development frequently motivates a desire for collaboration.

In summary, team learning, through the use of semiautonomous groups, utilizes non-traditional pedagogy, but relies in part on a traditional educational format in that the development of theory is followed by the application of

concepts. This model of self-managed learning, therefore, combines both experiential (as well as case analysis) and non-experiential activities (such as mini-lectures and exams) in an effort to motivate the student and enhance the learning process.

Outcomes Associated with Team Learning

Studies of team learning have demonstrated improvements in the development of basic conceptual, analytic and synthesis skills; a change in student attitudes and an increase in attendance. In addition, students' evaluations of their own progress was shown to be significantly greater with team learning than traditional educational formats (Michaelson, et al., 1982). The combination of excitement about the class design and the influence of peer evaluation seem to work as a powerful motivator.

The benefits of peer teaching are demonstrated quite clearly by the results attained on quizzes and tests. In every case experienced by the author, mean scores achieved on team exams were significantly greater than mean scores reported for individual exams. One study examining student reactions to team learning revealed that 87% of the sample (N=86) agreed or strongly agreed with the statement, "team learning is a valuable learning tool." A second statement, "team learning is a more valuable learning tool than the lecture mode of instruction," received a somewhat similar response (80%) (Mallinger, 1985). In addition, there was no significant correlation between the responses to the statements above and course grades. This statistic suggests that the final grade did not influence students' perception of the team learning experience.

The research tends to support the value of self-managed learning. The benefits to be accrued in a classroom environment where autonomy, personal development, participation, group interaction, and cooperation is found are multifarious. Improvements in learning and skill development are most likely to occur. Students tend to experience a greater sense of responsibility, take a more active role in the classroom and are more enthusiastic about attending class.

In addition, team learning offers numerous benefits to the instructor. Managing a self-learning environment is likely to be intrinsically more satisfying than can be attained in a lecture class. Team learning can be a great aid to the prevention of burn-out. The challenge of stimulating and maintaining student interest tends to motivate and rejuvenate faculty.

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TABLE 1
A MODEL FOR SELF-MANAGED LEARNING: AUTONOMOUS WORK GROUPS AS TEAM LEARNING

CHARACTERISTICS OF AUTONOMOUS WORK GROUPS				
T E C H N I Q U E S	Significant, Meaningful Whole Task	High Skill Level of Group Members	Autonomy	Group Rewards
	Pre-instructional quizzes, cases, experiential exercises, projects, etc.	Heterogeneous, long-term groups	Student input in decisions regarding grade structure and course content	Group quizzes, exams, and projects
	Peer evaluation process	Exercises that stimulate cross-training	Team appeal process	Peer evaluation
			Development of peer evaluation system	
		Faculty Role	End Results	
		Resource manager	Increases in student:	
		Provide mini-lectures	Motivation	
		Facilitate group process	Satisfaction	
			Learning	
			Conceptual	
			Analytic	
			Application of material	
			Interpersonal dynamics	
			Attendance	
			Instructor rejuvenation	

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