St. John's University EDU 5300 – Organizational Theory and Planned Change Frank Smith

Unit VII. Part 2 – Organism / Human Resources What are the competing metaphors/ theories about how organizations work?

For Taylor and his supporters, work was physical, not mental or intellectual, and work was to be undertaken precisely as prescribed by the trained industrial engineers who conducted the time/ motion studies. Taylor adopted a scientific view and saw himself as a scientist, but he saw the workers only as the objects, not the agents, of science. Taylor's major book, <u>Principles of Scientific Management</u>, was published in 1911.

A Key to Taylor's Observations

According to the view of the worker as a calculating economic man, the worker would work as hard as he could in order to make the most money for the most units of work. When Taylor observed steel mill workers loading 92 pound ingots of pig iron onto railcars, he noted that the workers came to work and moved very quickly. During the day they loaded a total of 12.5 tons. Taylor estimated that the workers should be loading at least 47 tons per day – almost 4 times the amount they were currently loading. One could say the workers were not working hard enough; they were not efficient.

Actually, they were working too hard. What Taylor knew that made his work appear scientific is that physiological fatigue limits the amount of work one can do. Instead of working as hard as they could, the workers needed to take a rest after each ingot, in order for their muscles to restore themselves. Knowing this, Taylor could develop a work/rest routine that permitted the workers to load the additional ingots. Instead of working as hard as they could and exhausting themselves, the workers needed to be trained to follow Taylor's prescription. The supervisors with stop watches and time sheets enforced the prescribed formula of work with intervals of rest.

Challenge to Taylorism

Taylor and his followers were trained as industrial engineers. They were hired by many industrial organizations to observe physical work and to develop formulas to increase production. In the late 1920's and the 1930's, a team working under the leadership of Elton Mayo at the Hawthorne Plant of Western Electric brought Taylor's principles to the study of the relation of work conditions and the incidence of fatigue. In this instance, the number of electrical bank wirings or solderings was assumed to be controlled by fatigue related to the intensity of light and maybe related the level of heat. Mayo and his colleagues set up a series of experiments in which they varied the level of light. The theory was that as they lowered the lights, the workers' eyes would become fatigued and the number of wirings would decrease. What the researchers needed to know was the optimal level of light for the optimal production of wirings.

Surprising Findings and a New Theory

When the experimenters varied the level of light, contrary to their expectations, the number of wirings remained mostly constant. Even when the light was near the level of moonlight, the production level remained high. Something other than physical fatigue appeared to be controlling the production. If not fatigue, what?

What Mayo and his colleagues came to realize was that the workers as a group were controlling the production. It was neither the work formula of the supervisors nor physical fatigue that set the production level. The workers had created a social network, or their own group with their informal leader. The informal leader of the work crew watched the members and enforced the group's norms about what work should be done. In order to have extra pieces to use when a member needed to work less or when the lights were too low to see, the group stockpiled some pieces and brought them out when necessary. Being included in the work group was very important, so much so that the members responded to the informal leader, who would ostracize a person if that person ignored the group norms. Membership in the group was more important than a simple calculation about how many units to produce in order to get higher pay and more important than following the prescriptions of the supervisor. The actual work level was never as high as the group could work, but it was sufficient to be respected. Knowing that they were part of an experiment, the group members wanted to earn the respect of the researchers. As a result the workers kept the level of wiring constant, which is what they thought the researchers expected of them. Mayo and his colleagues developed the human resources or organism metaphor to explain their observations.

Workers' Needs

Mayo and his researchers realized that workers have interests and needs other than simple economic income. Workers have social, personal needs. Engaging workers meant more than giving them a time/ motion formula and supervising their effort. Workers wanted to be related to and respected by their colleagues. They wanted meaningful work, not just a paycheck. What organizational leaders must do is to provide work situations that help workers develop, grow, and satisfy their mental and emotional needs. They need to manage the human resources represented by the workers.

Abraham Maslow was a pioneer in presenting a framework of human needs. He thought that humans had a hierarchy of needs, starting with physiological, then security, social, ego and self-actualization. The needs attended to by the scientific managers were only the lowest level: physiological and security. The other needs were attended to by the informal leader and the group. If managers were to be more successful in directing the work of the organization, they needed to attend to the high needs of the workers; thus, the shift towards more autonomy, responsibility, recognition and social engagement for workers.

Needs of the Organization

As the study of human needs continued, researchers realized that the organization itself existed in the larger environment and just as the individual needed to fit into his work situation and gain satisfaction from that relation, the organization itself needed to adjust and fit into its environment. The notion of the organization as an open system became an

important idea. Instead of looking inward to its workers, the organization as an open system also needed to look outward, to its suppliers and to its customers. It is somewhat limiting to think of organizations as simply adapting to their environment, since insightful leaders see possibilities and options that move in different directions and in fact create a new environment. Think of Steven Jobs and his creation of the Apple products.

Key Questions for the Organism Metaphor/ Theory

Again relying upon the suggestion of Robert V. Carlson that the metaphors or theories are most useful because they provide diagnostic questions to use when looking at an organization, we provide a set of key questions and underlying assumptions for the Organism/ human resource metaphor. Go to the resource folder and study HR / Organism VII.2.

Assignment for Unit VII Parts 1 and 2

When you have read the key questions for Part 1: Structural and Part 2: HR/ Organism, go to the assignment folder for the assignment that refers to both of the metaphors. Look for Assignment Unit VII.1 & 2.