

Henry Dennison, Organization Engineering, New York, McGraw-Hill (1931).

Henry Dennison was born in 1877 in Roxbury, Massachusetts. His formal education was obtained at Harvard University, from which he received an A.B. degree. He obtained a wide range of managerial experience as president of his family-owned firm, Dennison Manufacturing Company, in Framingham, Massachusetts. A pioneer in executive education, Dennison maintained a "history room" in his plant containing factual information about the development of the company's policies since its founding in 1844, which was reserved for guidance of Dennison's top executives.

His other accomplishments included service as Director of the International Management Institute in Geneva, service as an adviser to the National Resources Planning Board, and a directorship of the Federal Reserve Bank of Boston. He was also the first American employer's representative to the International Labour Office. He died in 1952.

The Work

Dennison foresaw the trend away from one-man control of organizations and emphasized the necessity for building effectively functioning groups into organizations "by steady progress in the application of our knowledge of the social sciences." (p. 175)

Organization Engineering was published in 1931, two years after the beginning of the Hawthorne experiments and eight years before the publication of Roethlisberger and Dickson's The Industrial Worker, describing the results of the experiment in 1939. However, the book anticipates many of the points brought out by the Hawthorne Experiments regarding the importance of smoothly functioning groups in organizations.

Dennison saw the task of organization engineering as making group activity successful within organizations. This, he felt, was the key to an organization's

realizing its greatest possibilities through providing conditions under which people will work most readily and effectively, conditions which will result in their "free, interested, and spontaneous activity." (p. 2)

The book is divided into four main sections which Dennison saw as four main areas of consideration or study in organization engineering. These include: a) men working in groups, b) impulsion, c) direction, and d) organization structure.

Men Working in Groups

In this section, Dennison considered various factors related to the effective functioning of groups within organizations. These include: 1) consideration of human diversity, or the variations among individuals working within groups; 2) the problem of friction between members of a group and ways to deal with it; 3) the conditions necessary for effective team work within groups; 4) the necessity of leadership in work groups and some considerations about the proper way to lead; and, 5) the proper way to use authority to develop motivation on the part of employees.

Impulsion - *developing motivation*

In this section, Dennison considers several types of human needs or "motives" which relate to work behavior. He divides these into four basic categories which are: 1) Self-serving Motives, which are primarily economic and relate to personal satisfaction and security; 2) Craftsmanship, which includes pride in ones work and "the desire to express one's self through manual activity" (p. 85); 3) the Need for Social Respect from one's work group, which is intimately related to self-respect; and, 4) motivations arising from Loyalty to the organization.

One of the tasks of organization engineering, according to Dennison, is the design of work conditions which will allow these motives or needs to be satisfied by individuals in the course of their work.

Direction

"As an organization succeeds in impelling its members to greater efforts it finds it more and more important that these efforts should be steered into right directions" (p. 105). In this third section, Dennison described two main types of direction which are: 1) Training for the Job, which includes giving an employee a clear idea of his duties through a clear job description, and then teaching him to perform them; and, 2) Education for the Future which involves preparing members of the organization to meet new complexities in a changing world.

Organization Structure

In this final section, Dennison considers the relationship of organization structure to the effective performance of individuals and groups within it. He maintains that there is no one best structure for an organization. Rather, he states "just what structure will prove best for any organization depends upon the specific task it is meant to perform, the kind of men it can get, and the particular conditions under which they work," (p. 123) thus anticipating one of the central points of modern contingency theory of organizations.

The specific aspects of organization structure which Dennison considers include: 1) the necessity for Adaptation or flexibility in an organization's structure; 2) the relationship between Structure and Leaders, and how the right structure will attract good leaders; 3) the relationship between Structure and the Task; 4) the necessity for Departmentalization and some of the problems with it; 5) the use of Functional Staff to deal with specific projects; 6) the need for Planning and Authority to achieve organization goals;

7) the importance of Cross Contacts ^{Based to} or horizontal channels of communication in organization functioning; 8) the functions and proper structure of Committees; 9) the need for External Coordination, or the recognition of the demands placed on the organization by the outside world; and, 10) the need for Continuous Reorganization as a way for an organization to adapt to changing conditions in the environment.

In conclusion, Dennison sees as the task of organization engineering, "to build groups into organizations--to minimize and utilize the frictions and the conflict, to set free and direct the natural forces latent in mankind to the better service of mankind--slowly to learn to integrate men's natural responses so that men may know more life, not by stealing from the lives of others, but by enriching them." (p. 195)