

3-1948

Discussion Method in War Industry..

Milton Dickens

University of Southern California

Follow this and additional works at: <https://cornerstone.lib.mnsu.edu/gavel>



Part of the [Speech and Rhetorical Studies Commons](#)

Recommended Citation

Dickens, M. (1948). Discussion Method in War Industry.. The Gavel of Delta Sigma Rho, 30(3), 47-50 & 53.

This Article is brought to you for free and open access by Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato. It has been accepted for inclusion in The Gavel of Delta Sigma Rho by an authorized editor of Cornerstone: A Collection of Scholarly and Creative Works for Minnesota State University, Mankato.

Discussion Method in War Industry . . . *

MILTON DICKENS (SC)

(Douglas Aircraft Company, Inc., and University of Southern California)

The most obvious difference between conferences held at a university and those at a war factory is usually—just noise. You are accustomed to tiptoeing about the main library. You frown at the unfortunate student who drops a book on the floor during class. Then, abruptly you enter a sprawling war plant and are escorted to a "conference room" made of plywood partitions in the midst of a work area. You conduct your meeting against a steady background of rumble and vibration, punctuated by occasional announcements over the public address system plus whatever unbelievable noise is peculiar to the nearest production department—the crash of drop-hammers, the scream of routers, the thunder of airplane motors, or the yammer of rivet guns. To create "an atmosphere of informality" at a conference where everyone must speak in loud shouts is a neat trick indeed.

You will have to compete against various other distractions. Thus, in the midst of one session at which I presided, workmen arrived and without a word of explanation proceeded to remove a wall of the room. Another time four plumbers entered with long pieces of pipe, ladders, and tools, and installed a sprinkler system in the ceiling. Members of the conference group shifted their chairs as the plumbers shifted the ladders, or ducked their heads as the plumbers swung the pipes into place. No one seemed to consider the incident the least bit extraordinary.

Despite the noise and inexplicable interruptions you begin to study the people, looking for fundamental differences between them and college students. But you don't find any! Of course, you notice some superficial contrasts. In appearance, workers are older and have grease on their clothes. Their speech is less grammatical and sometimes profanely colorful. Their ideas come from the shop rather than books.

None of these differences, however, is fundamental. The important thing about conferences in war industry, therefore, is that they are not basically different from other conferences.

I

One of the most startling facts about war industry conferences is that there have been so many of them. Within a year several thousand persons were given a concentrated, standardized course in

conference leadership. They in turn went out into the plants and conducted tens of thousands of standardized conference series. Within two years more than 1,500,000 foremen and key workers were formally "certified" as having satisfactorily participated in these conference series. It is probably conservative to estimate that by the middle of 1944 over 16,000,000 hours of organized group discussion were held.

These figures do not include the uncounted thousands of spontaneous or informal job conferences which are a part of the daily routine in any large industrial establishment; nor do they include the meetings of such groups as labor-management committees, grievance boards, labor unions, or the like. The figures are limited to one program, created and executed by governmental and industrial agencies, aimed at the solution of a specific problem. Thus, it is probably the largest single discussion project ever attempted.

II

During the months following Pearl Harbor, American war industries not merely expanded; they exploded. Plants which formerly had numbered their employees by hundreds, suddenly began to count them by thousands. New buildings and equipment were hastily constructed or installed. Complicated tooling was built. Enormous production schedules were set. Slogans were adopted. And the great drive was on.

The crop of new workers was mostly green. There were the women, from their kitchens; high school boys; white collar men from non-essential businesses. There were "floaters" and "shoppers," the physically handicapped, and oldtimers called back from retirement.

These new workers needed good supervisors—people to organize them into working groups, assign them to the jobs for which they were best fitted, teach them the skills of riveting, drilling, welding, or operating the punch press. To secure this necessary supervision, hundreds of skilled prewar workmen were promoted from the bench or the line. Many of these men totally lacked experience or talent for supervisory responsibilities. Good at handling tools, often they were poor at handling people. Able to do given jobs themselves, they might be unable to teach others how to do them.

To bolster these inexperienced supervisors with assistance and advice, many plants sought personnel experts. But

* Adapted from QUARTERLY JOURNAL OF SPEECH, Vol. XXXI, No. 2, April, 1945, by permission of Professor Dickens.

here again there was an acute shortage of qualified and experienced men. Consequently, a good many ex-promoters and high-pressure salesmen "sold" themselves into the industries.

Thus, shop work was done by ex-housewives who knew nothing of shop work, supervised by ex-shopworkers who knew nothing of supervision, trained by ex-salesmen who knew nothing of training. A favorite gag was, "You don't have to be crazy to get along here but it helps." And the most puzzling question among thoughtful newcomers was how the planes and ships were produced at all.

This was the much publicized "manpower crisis." It was the problem which was attacked and partially whipped by the organized mass-application of the conference method.

III

The War Manpower Commission set up a branch called Training Within Industry (T.W.I.). Four experts in industrial training were borrowed to head up T.W.I.'s program—C. R. Dooley of Socony Vacuum, Mike Kane of Bell Telephone, William Conover of U. S. Steel, and Walter Dietz of Western Electric.

T.W.I. began by creating a formula. It is a simplified, step-by-step formula for teaching a worker to do a particular job. On the basis of experimental trials in a few war plants, it was believed that if every foreman and leadman faithfully followed this formula workers could be taught specific jobs more thoroughly and in a fraction of the usual time.

This raised the question as to how this formula could best be taught to the leadmen. Of course, it could easily have been written up in pamphlet style and copies distributed wholesale. Most of the lower level of supervisors, however, were newly promoted from the bench and were not "the readin' type." Furthermore, the basic principle of the formula was that we learn by doing. The possibility of spreading the gospel by means of lectures was likewise discarded. These men were not trained listeners, were not likely to take notes, would resent "being sent back to school." It was, therefore, decided to use conference techniques.

But where could T.W.I. get several thousand conference leaders? Since almost none appeared to be available, T. W. I. decided to train some. They figured on drawing a few talented men from industry itself—men who could temporarily be spared from production and loaned to training departments. They could also draw upon a considerable pool of professional men, mostly above draft age—lawyers, salesmen, teachers, or others with some experience in dealing with people. From such raw recruits they hoped to shape a huge army of trained conference leaders, capable of going out

into war plants and teaching groups of leadmen the T.W.I. formula.

Recognizing that the prospective leaders would generally know very little about the subject matter to be taught, or about the workers, or about conference devices, T. W. I. did not attempt to cover all this ground. Instead, they prepared a conference leader's outline in extraordinary detail and then simply taught the prospects how to use the manual. In other words, they did not try to teach how to lead conferences in general but how to lead **one particular series** of conferences.

The presentation of the formula was entitled Job Instruction Training and was known as J.I.T.¹ It was decided to present J.I.T. as a series of five, two-hour conferences for groups of about a dozen leadmen or workers. A minute-by-minute outline of these five sessions was written. T.W.I. leaders then rushed about the country holding "Institutes" in which would-be conference leaders were taught to use this outline.

An Institute was limited to about ten learners and lasted one week. It was a hectic, grinding week—eight to twelve hours a day. To open the Institute, the T.W.I. representative would ask the group to imagine themselves as factory leadmen or foremen and to "act the parts." He would then run off the five sessions exactly as though in a war factory. The remainder of the week was devoted to the practice efforts of the group members to duplicate what the T. W. I. man had done. It was drill, drill, drill. No deviation from the manual was permitted.

"Frank, will you please step to the head of the table? Take that section starting on page 14. Now, I want the rest of you fellows to act your parts. Remember you are supervisors. Okay, Frank, let's go. . . . Wait a minute. Wait a minute. Go back to where you are supposed to draw that circle on the blackboard. You fellows are going to have to practice drawing those circles. Try this way. . . . Jack, will you take the chair? Go back again to page 14. We'll try the same section once more. . . . Does someone have a question? Wally? Well, don't worry about why, just do what the manual says. Does that answer your question? Stick to the manual, gentlemen, **STICK TO THE MANUAL**. Do I make myself clear?" And so on by the hour.

Those who survived a week of this were given certificates designating them as War Production Trainers. They began to roll out of the Institutes by the scores. Although not considered finished products, they were sent immediately into war plants where they were expected to pick up the finer points of discussion leadership through actual per-

formance. To assist them, follow-up men from T.W.I. went out to observe, criticize, and coach.

As the War Production Trainers infiltrated industry, they began to run off J.I.T. series in wholesale lots. The criterion by which their success was judged by Management was quite simple. Did the program increase production? Management did not know or care about artistically conducted conferences. They wanted results—results in terms of man-hours per production pound. Judged in such terms, there were plenty of failures but there were also plenty of successes. After taking J.I.T. some foremen and leadmen were using the formula with phenomenal success. Hundreds of enthusiastic testimonials began to pour in like this:

The treasurer of a Texas Oil Company reports that he personally observed the work of two "rough-necks" on a drilling jig. They had J.I.T. instruction and were doing an outstanding job although it was only their sixth day of employment. The driller in charge said that the quality of their work was higher than that of many employees after twenty years of experience.

J.I.T. could be used like any other production tool—like a jig, lathe, or die. Perhaps Department 950 is behind schedule on the outer wing assemblies. Investigation reveals that the cause is too much rework because of faulty workmanship. What to do about this? Answer: J.I.T. In such a fashion the conference became a tool with which ships, planes, and tanks were built.

The immense popularity of J.I.T. encouraged the leaders of T.W.I. to create another program. This time they tackled the problem of job-simplification.² The basic idea was to teach a few thousand leadmen and key workers how to invent faster, better methods for doing specific jobs. In this way fewer workers or less skilled workers could be utilized, widening manpower bottleneck a bit further. Again a formula was constructed, this one based upon the familiar techniques of time and motion study. The formula was expanded into another manual covering five two-hour conference sessions. The program was called Job Methods Training, or J.M.T.

By the end of 1942 a third program was ready for "production." This time the attack was upon personnel problems. The strategy was to teach supervisors how to handle such matters as wage grievances, racial frictions, or absenteeism.³ In this way manpower utilization might be improved by removing obstacles from the path. And so a formula was created, based upon the principles of applied psychology. It was elaborated into the customary manual for five two-hour

conferences and was christened Job Relations Training, or J.R.T.

J.I.T., J.M.T., and J.R.T. were of, by, and for mass production. They did what they taught. The entire project was characterized by principles of simplification, standardization, and acceleration. This aspect was emphasized by the shop talk of the War Production Trainers. At the Institute they were "processed." Each program was a "package." Sessions were not taught nor led but "pitched." Coaching by follow-up men was "quality control." Everything possible was handled with machine-like precision. Thus when one Trainer was forced to leave a group in the midst of a session, another Trainer was hastily called. The new man glanced at the Manual to see how far along the conference had progressed, then picked up at the precise sentence with which his predecessor had left off. Truly mass production—interchangeable parts. Discussion by the package!

IV

All three Manuals are recommended reading for anyone interested in clever discussion devices. Even in the hands of inexperienced leaders these techniques are likely to hold the attention of group members, draw out considerable active participation, and put across the main ideas.

As an example we may consider the use of a dramatic illustration with stage properties as prescribed for the opening session of J.I.T. The purpose of this device is to demonstrate to the group that in teaching a worker to do a mechanical job, just **telling** him is not enough, merely **showing** him is not enough, but that there is a "sure-fire" method consisting of **telling**, **showing**, and **doing** it in proper sequence. The illustration begins with the leader standing in front of a member of the group who has volunteered to be the "learner." The leader then tells the learner how to tie the fire underwriter's knot, a job from the electrical trade. (The Manual is careful to insist that the Trainer "KEEP BOTH HANDS IN POCKETS.") Now, the job of tying this knot is really very simple, once you know how. Any attempt to describe the operation in words, however, soon degenerates into incomprehensible double-talk, featuring distinctions between the right and left hands, holding the cord vertically or horizontally, and forming loops with a clockwise motion. At the conclusion of his description, the leader unexpectedly produces some lamp cord from the table drawer, hands it to the learner, and asks him to tie the knot. Usually the victim refuses even to make the attempt.

At this juncture a bit of humor is interjected. The leader says, "I know it couldn't happen at this plant, but I have heard that at other plants there are fore-

men who put new starts on a job merely by telling them what they are expected to do." Members of the group rise to the bait and relates cases they have seen.

Securing another volunteer, the leader silently shows him how to tie the knot. "Now you try it," he says, handing over the cord. Usually, the learner makes a brave attempt, but his struggles merely produce a series of weird-looking tangles, all highly amusing to his colleagues. Again the leader points the moral, condemning the practice of putting green workers next to experienced ones and simply instructing them to watch the operation until they learn how to do it.

Calling for a third volunteer, the leader proceeds to teach him in about ten minutes how to tie the knot. Then, by means of a nice set of leading questions, the group is encouraged to analyze the steps in this teaching sequence. In the ensuing discussion, the foremen bring out every point while the leader appears merely to write them on the blackboard in the words of the speakers. At the end, however, the trainer suddenly reaches into the desk for some small cards which he distributes. Printed on the cards is the J.I.T. formula—almost word for word like the blackboard notes. To some, the process seems magical.

A teacher of speech is likely to conclude that the whole thing is completely cut-and-dried. In fact, a colleague recently referred to them as "pseudo-conferences or conference-like instruction" in contrast to "genuine conference where ultimate conclusions are not determined in detail in advance." This, however, is an inaccurate impression. A J. T. session is an example of the learning group and the problem-solving group, interestingly combined. Thus in J.R.T. the primary purpose is to teach the participants a method for handling personnel. As in any other learning group, the material to be taught is predetermined. In order to practice this method, however, the foremen bring in to the group actual on-the-job problems. Neither the problems they bring in nor the solutions for such problems are determined in advance by the leader. The technique used to control the method without controlling the result is called Standard Case Procedure. It is worth describing.

A dozen foremen are gathered and one of them has been called to the head of the table. He is about to tell a case from his own experience, perhaps a problem which he is even now attempting to solve.

It will involve one or more of the workers he is supervising. It will involve twisted human relations—wage disputes, marital difficulties, jealousies, drunkenness, failing health. No matter what the case is, the discussion leader must guide the group through a logical, step-by-step analysis. He must do this in such a way

that the members will learn the pattern and want to apply it to future problems on-the-job.

The supervisor says, "I got a worker, a Mexican fellow, who came on about eight months ago and was doin' a pretty fair job. I never paid much attention to him till yesterday. He comes into the department half an hour late and throws his coat and hat on the floor. I go to him and say, 'You know it's against the rules to leave things on the floor. Then, loud enough for all the other workers to hear, he says to me, 'If you don't want them on the floor, pick them up yourself.' Well . . ." At this point the foreman pauses to look around the group, "If you had been in my place, what would you have done?"

Before anyone can answer this question, the leader is on his feet talking and heading for the blackboard. At the top he writes, "Just What is This Supervisor Trying to Accomplish? This may lead to quite a discussion. Finally, he writes, "To get X on the beam," and "To set a good example for the other workers."

"All right," says the leader, "What's the first thing we do?" Most of them know the answer. "Get the facts," they recite. The leader prints on the board: FACTS. Then the foreman is questioned about his case. As each fact emerges, the leader jots it down briefly on the board. Soon he has a list something like this:

X is a fair worker
Been here 8 months
Etc.

And so the analysis progresses. Presently, they reach the point: POSSIBLE ACTIONS. Another list is developed. It may include:

Fire him
Pick up coat yourself
Call him to office for private talk
Etc.

Eventually the whole case is neatly charted on the blackboard with proper headings and a few dotted lines and arrows. According to the Manual, the leader must carry his group through 22 steps during the whole performance which is supposed to take an average of 35 minutes per case. In the hands of a novice, this Standard Case Procedure can bog down and become quite a mess. In the hands of a skilled conference leader it can become a beautiful instrument for the stimulation and guidance of the process of group thinking.

The rapidity with which the J.T. programs spread through American industries is hard to appreciate without actually having observed some of the process in action. T.W.I. sent its staff from coast to coast. Like parts on an assembly line, War Production Trainers flowed through the Institutes. The Trainers

(Continued on Page 53)

torney with offices in the Hospital Trust Bldg., Providence, Rhode Island.

Jerome N. Curtis (WR) is an attorney with offices in the Union Commerce

Bldg., Cleveland, Ohio.

Gordon Mills (WAY) is Director of Forensics at Los Angeles (California) Junior College.

Thomas Brackett Reed . . .

- al House," NORTH AMERICAN REVIEW, v. 149, October 1889, p. 425
- (8) Reed, "A Deliberative Body," OP. CIT., p. 150
- (9) IBID., p. 151
- (10) IBID., 1. 150
- (11) LOC. CIT.
- (12) Robinson, Wm. A., THOMAS B. REED, PARLIAMENTARIAN, Dodd, Mead and Co., N. Y., (c 1930), p 257
- (13) By actual count, taken from the INDEX to Vol. 23, Parts 1-7, 52nd Congress, 1st Session, Dec. 7, 1891 to Aug. 5, 1892, and INDEX to Vol. 24, Parts 1-3, 52nd Congress, 2nd. Session, Dec. 5, 1892 to March 3, 1893.
- (14) These speeches were: (1) Against the Mills Tariff Bill, May 19, 1888; (2) In favor of repeal of the Sherman Silver Purchase Act, August 26, 1893; (3) Against the Wilson Tariff Bill, Feb. 1, 1894.
- (15) Robinson, OP. CIT., p 262
- (16) Leupp, Francis E., "Personal Recollections

- of Thomas B. Reed," THE OUT-LOOK, v. 96, Sept. 3, 1910, pp. 36-40
- (17) IBID., p. 37
- (18) Alexander, OP. CIT., p. 126
- (19) Robinson, OP. CIT., p. 261
- (20) IBID., p. 262
- (21) Stoddard, Henry L., AS I KNEW THEM, Harpers, N.Y., (c 1927), p. 192
- (22) Roosevelt, Theodore, "Thomas Brackett Reed and the Fifty-First Congress," THE FORUM, v. 20, December 1895, pp. 410-418.
- (23) Reed, "A Deliberative Body," OP. CIT., p. 155
- (24) The complete story of this dramatic battle is told in the CONGRESSIONAL RECORD, First Session, Cong. 51, vol. 21, January 29, 1891, pp. 948-1024.
- (25) Reed, "A Deliberative Body", OP. CIT., p 156
- (26) Resolution by Rep. Sherman, N.Y., in the House of Representatives, upon the death of Reed, December 8, 1902.

Discussion Method in War Industry . . .

taught the leadmen. The leadmen taught the workers. Handed down in this fashion, the J.T. formulas reached ten million workers in a mater of months.

It is important to know that the democratic method of group discussion had again proved itself an effective educational and problem-solving device. It is important to know that this effectiveness was demonstrated on a nation-wide scale. But probably most important of all is the fact that the job was done so quickly.

Democracy has been criticized for being slow. To convey information or to solve problems by means of group and public discussion, it is said, requires a distressingly long time. By contrast, the propaganda methods of authoritarian societies are thought to be inherently quick-reacting and more efficient. The T.W.I. project stands in rebuttal.

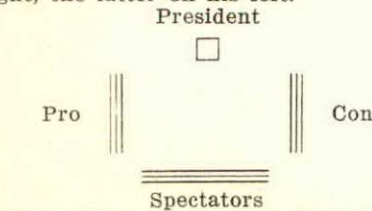
Teachers may well face this fact: So vast a project in group discussion was conceived and effected by leaders from the fields of industrial training and industrial engineering rather than from the field of speech. The speed with which

the War Production Trainers were produced is especially provocative. To teachers of speech the idea of covering the art of conference leadership in a one-week course may seem absurd. A year's course in Fundamentals of Speech, followed by a year in Public Discussion and Debate, plus about two years of extra-curricular speech activities, might not seem excessive. Thus, T.W.I. measures in days what we measure in years. Perhaps theirs is "too little" and our "too late." It is a stimulating challenge to re-examine our whole approach. For despite many limitations and failures, the T.W.I. Institutes have demonstrated that adequate conference leaders can be trained in a much shorter time than many of us had previously thought possible.

1. Stuart Chase, "Show-How: A Revolution in Management," READER'S DIGEST, October, 1943.
2. Stuart Chase, "To Do It Easier and Do It Better," READER'S DIGEST, November, 1943.
3. Stuart Chase, "Teaching Foremen That Workers Are People," READER'S DIGEST, September, 1943.

English-Style of Debate . . .

sit facing those who oppose it, the former ranging themselves on the President's right, the latter on his left.



(10) The speeches are clocked by a

timekeeper. Members must bring their remarks to a close upon receiving his signal.

(11) A member may speak on any phase of the subject he desires. The President will, however, rule out of order any member who attempts to introduce material which is obviously not germane to the discussion.

- (1) Representatives of Denison University, Kenyon College, Oberlin College, Ohio Wesleyan University, Otterbein College, Oxford University, and The Ohio State University participated.