

## Let's Look at In-Service in Industry

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HOW THE HOUSEWIFE, the farmer, and the office girl learned to take their places in industry's production line is an in-service program of impressive proportions. During the war emergency approximately seven and a half million workers—many of them never before inside an industrial plant—have satisfactorily adjusted themselves to war production jobs. The directness and efficiency of the training program, conducted on a co-operative basis with government, industry, and public vocational schools, are attested to by the fact that industry has met its production schedules far in excess of the most optimistic calculation of five years ago. Industry's record is worthy of study by school people, since education, too, is faced with the task of helping men and women adjust to jobs.

Management and labor have long recognized the importance of on-the-job training. In our absorption with the present, we often fail to realize that for twenty-seven years federal, state, and local vocational training programs utilizing the counsel of employer and labor groups, have existed. Today these programs are organized (1) to give technical and related instruction which will enable workers to keep abreast of conditions brought about by technological changes and to improve their effectiveness on the job and (2) to prepare youth for advantageous entrance into trade or industrial pursuits. In either instance workers are provided with instruction designed to increase their civic and vocational intelligence.

### For Well-Planned In-Service . . .

One of the least conspicuous but very important factors in industrial education with which vocational education is concerned is the representative advisory committee. Composed of equal numbers of representatives of employers and workers these committees operate in three areas—state, local, and craft. It is the function of such committees to discuss with public school authorities the needs for training, kinds of training to be offered, and changes occurring within the trades and industries that affect training.

Representative advisory committees reflect the actual situation existing within the trade or industry and when put to full use by vocational education authorities they become a most reliable source of information upon which to establish a sound vocational education program. These committees are also a continuing help in maintaining training programs on an effective basis.

During the present war and under the regulations affecting the war production training program, the use of advisory committees has been greatly accelerated, which fact has helped to improve the relationship between industry and public vocational schools. Through the operation of these committees industry has become better acquainted with the services available in the vocational schools and more school authorities have found a medium through which industrial training needs can be more accurately determined. Recommendations made by advisory committees have been sought by school authorities and in many instances have effected changes in vocational school policies. Advisory committees have likewise projected their influence into industry with the result that many plant training programs have been improved, apprentice training established, safety programs promoted, and numerous other improvements made that will definitely benefit both management and worker.

### Schooling on the Job

Industry's supervisory training program is of particular pertinency to education. Supervisors and would-be supervisors in industry learn their jobs through two types of vocational training. One is the conference method which is especially suited to experienced supervisors, and the other is a course in supervisory techniques offered to promising employees who show aptitude for working with people and for assuming responsibility.

The conference method gives members of the group a chance to pool their experiences. Through such collective thinking the most practical and feasible solutions are found for handling problems affecting plant personnel

or production. Foremen learn how to work with other employees, better understandings exist between departments, and production techniques are improved. In all a common understanding and human relationship is encouraged among the workers which tends to harmonize total plant operations. The foremost objective, however, is to improve the technical knowledge of supervisory personnel so that they will be able to meet their everyday plant problems more effectively.

Training in supervisory techniques for aspiring and present supervisors wishing to increase their efficiency includes these important phases: (1) problems of working with others, (2) how to induct a new employee into the organization, (3) how to instruct employees in job operations and methods, (4) technical information on mechanical processes, and (5) production methods and controls.

The importance of an intelligent induction procedure for new employees was demonstrated during the mushroom growth of war industries. Consequently, a modern supervisor, having the responsibility of seeing that a good job is done, should be familiar with the techniques of induction and orientation. A tip may well be taken from the training procedures of the Army and Navy. Very early the services realized the absolute necessity of thoroughly instructing raw recruits so that they would understand their jobs, and realize their significance.

The supervisor as an instructor is partly responsible for the supervisory training which vocational educators are called upon to supply to industries. This phase of supervisor training is important because only a limited amount of the foreman's time should be occupied in "breaking in" new workers or in instructing present workers in new opera-

tions. Industrial management has learned that careful and effective instruction of employees on job operations saves time, equipment, and materials. More than that employees are better equipped to tackle their assignments with confidence. By utilizing the basic techniques of job analysis and instructional procedures, vocational educators for a long time have trained workers not only in job techniques, but also in the techniques of instruction so that they can quickly and effectively pass on their skills to others.

### A Program That Works

Turnover of new employees in war industries has in many cases been traced to the difficulty employees had in adjusting themselves to their jobs. This is especially true in the case of women workers. Many women went directly from housekeeping to production-line jobs where they faced innumerable adjustment problems. They had to learn to do a job that was entirely foreign to them and had to learn it under strange conditions where fright, shock, and the perplexity of factory activities predominated. Even with obstacles like this to overcome, planned induction and orientation procedures were most effective with women employees who were new to industrial employment. Short pre-service courses which included induction procedures were found to reduce labor turnover appreciably. Humanistic interests as well as production efficiency dictate the need for training that will give the new employee a feeling of security in his work environment and put him at ease on the job.

A practical example of how industry and vocational education together plan training programs is shown in the procedure followed by the Puget Sound Navy Yard at Bremerton, Wash. A vocational education representative was called in to conduct a series of conferences for women counselors at the yard. During these conferences the group developed a program for orienting new workers. Among other things the group decided that counselors in the yard should instruct new workers, individually or in small groups, about the responsibilities they are undertaking. Newcomers should be told about safety clothing required and the reason for its being required; about hours of work and about smoking rules. They should be told about the noise and the fatigue which they will ex-

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*An interesting parallel to in-service education in our schools is the job-training program in industry. There the personal adjustment of a worker to the whirling, thunderous machines all around him is as much a matter of concern as actual skill on the job. Experience has shown that the teacher, too, needs to understand her environment as well as subject matter if she is to be happy in her work. A glimpse into how in-service education operates in industry is given on these pages by L. S. Hawkins, chief of the Trade and Industrial Education Service of the U. S. Office of Education.*

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perience at first and later become accustomed to; about the first-aid and health facilities of the plant. The group also agreed that a simply written handbook would be a great help to employees, one which restates the same facts that had been given them by the counselor. Furthermore, new workers should

be introduced to their foreman or leadman and then be assured that the counselor would always be ready to discuss with them any personal problems which arise.

Thus, industry has tackled the job of helping millions of workers to function effectively and happily in job situations.

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## HELPS ON HOW TO GET STARTED

A new DSCD publication venture now in process is a plan through which the Department is supplying to state journal editors a series of eight articles that deal with problems of everyday living in the school situation. The articles are brief and are written particularly for the inexperienced or emergency teacher.

Approximately thirty state journal editors have indicated their intention to use all or a part of the series. The first three of the articles have already been sent to the various state journal offices. The complete series consists of the following eight articles, possibly to be reprinted later in bulletin form.

1. Getting Into the Swing—Beatrice Hurley, *Elementary School Teacher, Bronxville, N. Y.*
2. Scheduling a Busy Day—Evelyn Peterson, *Elementary Supervisor, Waterloo, Iowa*
3. Dressing Up Your Classroom—Lois M. Clark, *Assistant Director, Rural Service, NEA, Washington, D. C.*
4. Teaching the Three R's—Paul Witty, *Professor of Education, Northwestern University, Evanston, Ill.*
5. Frills, Fads, or Fundamentals—Stephen M. Corey, *Professor of Education, University of Chicago*
6. The Fourth R—Relationships—Alice Miel, *Division of Instruction, Teachers College, Columbia University*
7. Growth and Individual Differences—Ruth Cunningham, *Horace Mann-Lincoln Institute of School Experimentation, Teachers College, Columbia University, New York, N. Y.*
8. Learning to Be Americans—H. H. Giles, *Bureau for Intercultural Education, New York, N. Y.*

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