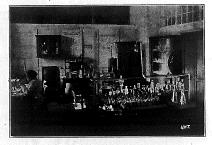


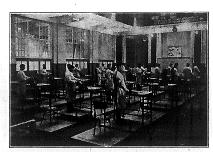
Investigation of Work in the Bio-Engineering Laboratory



Laboratory of Production Control



The Bio-Chemical Laboratory (Examining the Blood of Students)



Training Mechanics (Filing)

of labor insure the execution of its program. The following provisions are included in its statutes.

- 1. It is the central organ of the Trade Unions for investigating the problems of the organization of work.
- 2. It studies the different forms of the modern organization of work and develops methods and systems for its rationalization as well as new methods of industrial training.
- 3. It studies these problems by the methods of analysis; that is, by experiments in laboratories, clinical observations and production practice.
- 4. It is at the same time an educational institution which organizes different courses for the development of systematic workers in the field of management—administrators, technical employes, controllers, instructors and skilled workers.
- 5. It assumes the functions of investigation and of consultation on problems of organization and training for specific enterprises and draws up plans for separate jobs or for the whole enterprise as the case may require.
- 6. It acts as a consultant and expert in respect to the work of state institutions, co-operatives and trade unions.
- 7. It works out plans for the improvement of industrial education in state and trade union establishments
- 8. It organizes experimental and model workshops where its methods are tried out and new accomplishments in the fields of production, management and industrial training are demonstrated.

Its Methods

The method of the Institute has been applied in the following branches of industry and in the professions.

- 1. The metal industry—mechanics, turners, smiths, boiler makers, foundry workers, frazers, fitters.
- 2. The textile industry—fly frame tenters, ring frame tenters, drawers, weavers, skeiners.
- 3. The building trades—bricklayers, concrete mixers, building carpenters.
- 4. The wood working industries—carpenters, pattern makers.

Besides the work in the industries, the field of professional instruction has been studied and practical courses worked out for training teachers and workshop instructors.

The methods of the Institute are based on (1) its work of research, (2) the control of the training of skilled workmen, and (3) the analysis of the data obtained from this control.

In its analysis of the work of the professions and the working out of programs for them the following course has been followed.

- 1. Conditions are first organized for the study. Literary material on past experience is accumulated, studied, systematized and the data verified.
- 2. An analytical scheme is settled upon for determining the movements, operations, combinations of operations, the special abilities, the necessary equipment, working places, tools and the necessary materials that are required.
- 3. The qualifications of the profession or job are formulated. The biological characteristics of the job are first studied; these are then evaluated in their relation to efficiency, and finally a list of the qualities which will insure the attainment of the greatest efficiency is made up.
- 4. On the basis of this list of qualities a system of instruction is worked out which includes a plan, a program of operation and the necessary instruction sheets. Instruction is given in workshop practices, proper motions, and in theoretical questions of industrial training.
- 5. A system of control, which also includes a plan, a program of operation and instruction sheets, is likewise worked out. Conditions under which candidates will be accepted for courses are decided upon and methods of selection of candidates worked out. The development of skill is tested by comparison with the quality of production, by evidences of improvement in capacities and by examinations at the end of the courses given.
- 6. Analysis of the data of control is made in accordance with the clinical method. It is so called because it has been developed along lines analogous to those in use in modern clinics.

Its Direction and Organization

The organization of the Institute is functional. A Director, named by the Presidency of the Central' Council of the Trade Unions, is at its head. The present director is Alexei Kapitonovitch Gasteff, its founder and the person responsible for working out the methods which it follows.

Under the Director is the Council of the Institute made up of representatives of the trade unions.