

Dalton-Plan in the Context of Reforms of the Training Process in Soviet Higher Education in 1920-1930s

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ABSTRACT Under the conditions of reconstruction of the whole Russian economy, the essence, methods and the pace of education was drastically changed and the system of higher education, in particular, was radically modernized. The period in question was marked by extraordinary attention paid to higher education by party and state authorities. At that time the Dalton plan organizational system became widespread all over the world. This system, based on the principle of individual training, took its name after Dalton, Massachusetts where it was originally implemented by Parkhurst. In the USSR this training method was often called as brigade-laboratorial method or active-laboratorial. Precisely, the analytical comparison of this period with current state of affairs allows to spot both positive and negative experience of the higher education in the Soviet period, to historically reflect not only the ongoing processes but the ones which took place in the past.

INTRODUCTION

Higher education and science are pivotal components of cultural and socio-economic development of society. The young Soviet power which had strengthened its position after the victory in the Civil War, launched reforms in all important spheres of state policy. The system of higher education was not an exception. The main idea behind the reforms in higher education was profiling-deepening specialization of education. Under the conditions of reconstruction of the whole economy, the essence, methods and the pace of education was drastically changed and the system of higher education, in particular, was radically modernized. The period in question was marked by an extraordinary attention paid to higher education by party and state authorities. Precisely, the analytical comparison of this period with current state of affairs allows to spot both positive and negative experience of the higher education in the Soviet period, to historically reflect not only the ongoing processes but the ones which took place in the past.

The development of the professional education in 1920-1930s was an important and integral part of Soviet social and political reality. The intended purpose of universities was drastically changed. They were started to be viewed as centres for science and culture which produce practically relevant knowledge. The study of the problems of history of higher education allows us to understand the logics of development of this

social object, to find out patterns and generalized the existing practical experience.

METHODOLOGY

Archival founds F. R- 815 "Tomsk State University", F. R-561 "Tomsk Medical University" which are disposed by the State archive of Tomsk region served as main sources for this research. These finds include records of university academic board meetings, reports by faculties and departments concerning organization of training process and implementation of brigade-laboratorial method. Another body of sources is represented by regulatory documents, such as "Collection of legislative enactments and decrees of the Soviet Union Government", "Bulletin of Peoples Commissariat for education", material of the find F. 1053 "The department for education of Siberian revolutionary committee (Sibrevkom) (Siberian department for education (Sibono)) 1920-1925". All these documents were disposed by the State Archive of Novosibirsk region (GANO). The process of implementation of the brigade-laboratorial method in universities, students' and university lecturers' perceptions of it were reflected in the newspaper called "Red banner".

The comparative-historical method served as the main methodological tool for this research. It allows to reveal the essence of phenomena at hand by analyzing similarities and differences as well as to draw comparisons in space and time. This method helped the researchers to figure out common and specific in the state educational and

science policy in different historical periods. To determine various qualitative and quantitative characteristics of training process in universities the statistical method, the method of historical sociology and biographic method were widely used.

RESULTS

The Main Characteristics of the Dalton Plan

A novelty in the training process at the higher education institutions of the USSR were new methods of education. Encountering sabotage on the part of professors and lecturers of the main state universities, anti-Soviet and anti-Communist propaganda, which was overtly exercised by them on lectures, senior executives of the Peoples Commissariat for education (Narkompros) started to curb the role of professors in the training process implementing new teaching methods. These teaching methods were based on the so-called Dalton Plan.

The Dalton plan was a training activity organizational system based on the principle of individual learning. The Dalton plan was named after a town called Dalton, Massachusetts where it was designed and implemented by E. Parkhurst indifferent American schools in 1904-1920. This educational method and programs based on it acquired various titles. Keeping its original Russian title, "the Dalton Plan" (Dal'ton-plan), it was most frequently called "brigade-laboratorial method" or "method of projects", "active-laboratorial" etc. the collective name for these phenomena is "active methods of teaching" (Dewey 1922).

The main underlying principle of the brigade-laboratorial method was the independent "work-through" of the materials suggested by a teacher to a "brigade" consisting of several students. Teaching plans included sequence of work, course books, assignments, exercises, control questions. Instead of explaining new material a teacher gave a short introductory lecture (number of lectures was minimized) and advised students in case they had difficulties studying new materials. After having fulfilled all the assignments a final class was held where students elected a brigade leader. Brigade leaders were responsible for making reports on group work in progress. Exams and tests were abolished. In such a way, individual records of academic progress were not kept. Each brigade got credits

automatically. The role of a teacher was equaled to that of a consulter.

"A lecture no longer satisfies our needs", - said one of the reports of Tomsk state university.- Chief administration of professional education gives orders on application of diverse methods. The question of applying active-laboratorial method with written assignments and group workings-through on an equal basis with lectures. For the purpose of better learning and due to the expansion of practical exercises, introduction of seminars, Peoples Commissariat for education (Narkompros) planned to gain "wider engagement of students in active working-through of training material" (Documentation Center of the Contemporary History and State Archive of Tomsk Region, L. 14-24.).

Students' and University Lecturers' Perceptions of the Brigade-Laboratorial Method

Many professors and university lecturers strongly opposed the implementation of the brigade laboratorial method. At the third Siberian rector's meeting which was held (late December 1923-early January 1924) in Novonikolaevsk, the head of the Siberian chief administration of professional education, D.K. Chudinov called for speed-up in transition to active methods of studying (*Sobranie Uzakonenij i Rasporjzhenij Pravitel'stva SSSR 1932*). In 1924 *Narkompros* and the *Chief Academic Council (GUS)* persistently recommended drastic re-structuring of university teaching methods.

Among elderly Tomsk State university professors, only a medic, S.V. Lobanov consistently supported this idea. Also, a relatively young lecturer at the department for physics and mathematics, V.V. Reverdatto was a keen supporter of the reform. "The reform in medical education, - wrote Professor S.V. Lobanov - is dictated not by pedagogical aims and scientific achievements in the field of medical research, it is caused by drastic changes in our life and public medicine" (Litvinov 2002).

New initiative was widely supported by students. Only following the decision made by the Plenum of the Central Committee of the All-Union Communist Party (Bolsheviks) (TsK VKP (b)) and under pressure from students, Tomsk State university started an experiment. Methodical commissions consisting of students and university teachers were created. On the initiative put forward by students thematic commissions launched discussions about teaching methods and pro-

grams (Schwartz 1980). As a result, on three years of medical faculty 50 percent lectures were replaced by seminars. At three chairs of the department for physics and mathematics classes were organized according to the Dalton plan (1980: 170). «It is triumphantly remarked, that number of lectures is inevitably and consistently dropping. The so-called active-laboratorial method begins to dominate, given that the Dalton plan is considered to represent an ideal of this method», - said the article in the Tomsk-based newspaper "Red banner" [9].

The dean of the department for physics and mathematics at Tomsk State university V.D. Kuznetsov described the novelty being introduced for Tomsk State university the following way: "The new types of exams is introduced. Students comprise a group of 2-6 people and do preparation for their classes together, getting questions from different parts of a course. In their preparations students use textbooks and instructions. After a one-hour preparation, students answer questions collectively, given that one student answers a question and all others listen and make remarks..." (Red Banner 1934).

"At the medical faculty of Tomsk State university a methodical experiment was conducted", recalled doctor of medical sciences, Prof. P.T. Prikhod'ko, who was a student at the time. Students' knowledge was checked at colloquiums and exams according to the so-called Dalton plan. Essentially, the idea of the plan was to replace individual test or exam with a discussion when a professor talks to the whole group of 30-35 people. The professor asked a question and one of students answered it. Those students, who knew their subjects badly, strived to answer easy questions and as a result all students got good grades. This was suitable for lazy-bones, who managed to avoid serious work and still get good grades (Prikhodko 1980).

Despite obvious drawbacks of such a system, the first intra-university conference on the issues of teaching at university that took place in Tomsk in January 1925 ruled to treat lecture as "an outmoded and suited for a passive individualist student of the old regime" (1980: 143-144).

The Specifics of Implementing of the Brigade-Laboratorial Method at Medical Faculties and Faculties of Physics and Mathematics

The essence of the laboratorial (or brigade-laboratorial) system of teaching at medical uni-

versities is studying the training materials "in a way of independent active planning work of students with the materials in search of answers to questions and topics set up in advance by professors and following discussions with the brigade leader"

To work this way a student group (30 people) was divided into brigades (6 brigades, 5 people per brigade). The brigade was managed by a brigade leader.

The work along the lines of the brigade-laboratorial method included: a) an introductory lecture on an assignment; b) independent work with materials; c) consultations and turning-in of assignments; d) conclusive discussions. Instruction of the Peoples Commissariat for health ¹ 5 entitled "Laboratorial-brigade method of studying at medical universities" revealed the content of these stages: "An introductory lecture should set aims, present assignments, methods and plans for working-through" (State Archive of the Tomsk Region, L. 35).

Independent working-through materials included both individual and collective work. Students worked through tough assignments collectively and organized mutual control. In order to help students with the most difficult assignments in the period of individual working-through consultations were organized. Consultation time was to be used for getting assignments from each student as well as from a group as a whole.

A conclusive discussion was meant for checking the quality of worked-through materials, their generalization and giving to brigades deeper additional data on materials.

An introductory discussion was to take 20 percent of all time, dedicated to studying a particular topic, the conclusive one – 30 percent, independent student work and consultations by teachers - 50 percent (State Archive of the Tomsk Region, L. 35-36).

However, the laboratorial system of classes was considered to be transitional step toward more advanced system of training productive work at medical universities.

The studying process, in the view of the document authors, was to be closely tied to production process. That is why a medical universities should be turned "from educational body to a body which encourages students to participate in different fields of Soviet healthcare with a goals of resolving concrete issues of socialist

healthcare” (State Archive of the Tomsk Region, L. 35-36).

DISCUSSION

Critics and Shortcomings of the Implementations of the Brigade-Laboratorial Method in 1920s

Soon the implementation of the brigade-laboratorial method at medical faculties and faculties of physics and mathematics at Soviet universities turned out to be a failure. First of all, the reform was meant for advanced students, who were capable of studying independently. But it was not true about the majority of students. As a result, the system did not rise but declines individual activity and responsibility for the results of work. Finally, and more importantly, the leading role of professors and teachers was ignored. Professors of Tomsk State University along with their colleagues from other state universities protested against these methods and insisted on preserving lectures. The most active supporters of were the following professors at medical universities: A.P. Azbukin, V.N. Savvin, A.P. Opokin, and P.A. Lomovitsky. All of them called for preservation clinical lectures at medical faculties. “Without lectures it is impossible to train intellectual doctors”, they emphasized. Prof. V. N Savvin underscored, “During clinical lectures students learn how to analyze patients in the widest sense of the word –At these lectures students can spot normal and pathological particularities of organisms, to find out connections between separate organs, figure out the whole variety of healthless transformations as external life conditions”. Prof. A.N. Oporin posited, “Not even the best practical classes can substitute for clinical lectures” (Zaychenko 1960). Even Prof. V.B.N. Lobanov who at the beginning had be an active supporter of the reform (his articles on the topic were published in Tomsk regional journal of Komsomol-Communist journal call “Worker - Student” (Lobanov 1924) and had managed to “to build an authority as an expert in new methods” got disillusioned in the way the reform was conducted. It happened partly due to the pressure from colleagues. Eventually “his views turned to become more right-wing and changed his mind back in such a way that now he represents a double hurdle for implementation of the new method at universities”, said “The political re-

port of the TSU branch of the All-Union Communist Party on the conditions of the university in 1925-1926 academic year” (Documentation Center of the Contemporary History, L. 14-24.).

The preserved archival materials say that the reforms of training were conducted more slowly at medical universities (State Archive of Novosibirsk Region, L.124). At the majority of clinical departments of Tomsk University the brigade-laboratorial method was not applied. Lectures were maintained to be the most important form of teaching (Mendrina 1980). As a result in 1920s the brigade-laboratorial method was not applied in full measure at Tomsk State Universities. Under the influence of such moods, dominant in many state universities, the Chief administration of professional education (*Glavprofobr*) was inclined to restore traditional teaching methods: lectures, seminars. Etc (Zaychenko 1960). Characterizing the existing teaching methods in 1929/1930 academic year, the rector of Tomsk State University V.N. Savvin underscored: “The system of teaching is diverse. Social sciences are taught through lectures exclusively. But medical sciences are taught in a mixed way”. The lecture materials is worked through at practical classes, given that lectures are combined with demonstration of medications, tools and patients in clinics. Only some departments (for anatomy, hygiene, social hygiene and others) conduct classes in active-laboratorial way. Here the significant part of materials is worked through by students independently. The proportion of lectures and practical classes in general is 1:10 which is in line with the guidelines of Chief administration of professional education (*Glavprofobr*). At the faculty of physics and mathematics lectures take 30 per cent, practical classes -70 per cent (Zaychenko 1960).

All in all, the proportion of teaching methods was started to be determined by professors and teaching staff of Tomsk State University and depended not on abstract schemes but on the character of a discipline at hand.

However, over the course of the reform of higher education which was made on the basis of the July and the November Plenums of the Central Committee of the All-Union Communist Party (Bolsheviks) (TsK VKP (b)) massive attempts to introduce new active methods of education were made. From January 1930 classes were already conducted on new programs and plans. Instead of lectures the brigade-laboratori-

al method was used. “90% of all teaching was done along the lines of brigade-laboratorial method”, said one of reports, “In 1930 lectures were not supposed to occupy more than 14 percent of all training time”, said the other one. The proportion of special classes grew twice. For example, if earlier at the Department for Geology general subjects comprised 34 percent, now only 9 percent. It happened at the expense of general subjects, which lead to insufficient treatment of general scientific training and, in turn, the whole university education.

The Implementation of the Brigade-Laboratorial Method in 1930s

Yet another experiment with teaching methods at Tomsk State University continued for the Spring semester of 1929/1930 academic year, 1930/1931 and 1931/1932 academic years and the Fall semester of the 1932/1933 academic year. There results were almost the same as those of the experiment of 1924-1925.

The disadvantages of the brigade-laboratorial method were listed in the report made by the head of the department for higher medical education of Peoples Commissariat for education Prof. V.M. Banshikov at the 1st All-Union curriculum and instruction conference of medical universities of Peoples Commissariat for education (June 1932). Those are: mechanical application of the brigade-laboratorial method to all disciplines of medical universities, the replacement of the individual work and personal responsibility for the quality of the worked-through materials by the work of the brigade, “the establishment of some kind of grey-out in the work full professor, associate professor and teaching assistants”, insufficient involvement of professors as organizers of pedagogical process (State Archive of Tomsk Region. L. 9).

That is why it was recommended that along with the brigade-laboratorial method to use demonstrative, seminar, lecture, lecture-seminar methods, method of enlarged conversation, practical classes and other methods which “justified its usage in practice”. V.M. Banshikov touched upon a question of the role and functions of a professor at a medical university. He said that it was necessary “to urgently liquidate insufficient and improper usage of a professor as a head of a department, the role of which was lately limited to a role of a regular teacher”. He proposed to

establish such conditions under which a professor played a major role in the whole pedagogical process at the department and had an opportunity to arrange research and pedagogical staff, training-productive materials suitable for him. He also suggested to turn a department into “a central figure” at a university (State Archive of Tomsk Region. L. 10).

The most negative effect of the usage of the brigade-laboratorial method was the so-called “anonymization”. However, even at the times of wide application of the brigade-laboratorial method this phenomenon was fiercely criticized. For instance, the rector of Tomsk Medical Institute V.G. Kramarenko remarked in his order: “Despite repeated calls for the necessity to keep differentiated record of academic progress, many department still send academic progress report card where it is said that all students of a given group without exception have “good” and “satisfactory” marks” (Order Book For the Tomsk Medical Institute 1932). The decree of the Central Committee of the All-Union Communist party (Bolsheviks) of 25 August 1932 generalized all the mentioned drawbacks of the brigade-laboratorial method and criticized the practice of its application in all educational institutions of the Soviet Union.

CONCLUSION

Under the pressure of scientific-pedagogical community of the country the Central Executive Committee of the USSR (TsIK SSSR) “On educational programs and regime in higher education and technical colleges” of 19 September 1932 the application of the brigade-laboratorial method was criticized as a “methodological daydreaming” and was to be terminated. “Educational methods should, it was said in the decree, to increase the role of professors and teaching staff to make teachers responsible for organization of training and work of each student in particular” (State Archive of Novosibirsk Region (*GANO*) L. 12-22).

The decree of the board of the Peoples Commissariat for education said: “To consider the application of the brigade-laboratorial method unreasonable”. The Peoples Commissariat for education proposed to organize discussions at chairs and methodic departments about educational methods “in accordance with peculiarities of materials, levels of student advancement, pres-

ence of laboratories and other conditions". In the beginning of 1932/1933 academic year the brigade-laboratorial method in Soviet universities was terminated. Decreed of the Council of People's Commissars and the Central Committee of the All-Union Communist party (Bolsheviks) of 23 June 1936 reaffirmed this decision. According to this decree the main educational methods were lectures and practical classes.

Despite negative experience in implementation of the ideas of the Dalton Plan in the practice of training process in Soviet universities in 1920-1930s, it is actively used both in Russian schools (Center for Education 1080 "Ecopolis", Moscow) and abroad.

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