School n.a. Professor N.S. Nikolaev

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This article is devoted to the 80th anniversary of Professor N.S. Nikolaev, founder of the Academic Olympic Movement in graphic drawing in Yakutia. It highlights the contemporary issues in technic drawing teaching in the schools of Sakha Republic (Yakutia) and describes the obtained 50-year experience in Academic technic drawing Olympic management. The author also suggests advanced development paths for effective teaching methods to improve the training quality of school technic drawing programs.

Key words: drawing, graphic's task, school, individual approach, out-of-class work, Olympiad in drawing.



N.S. Nikolaev started his academic activities as part-time employee in 1956, i.e. from the opening of Yakutia State University (YSU). In 1957 he became assistant professor and, at the same time, deputy Head of Strength of Materials and Engineering Graphics Department.

In 1981 independent department "Engineering Graphics" was established,

the Head of which Associated Professor N.S. Nikolaev was elected, future Member of Education Board of Ministry of Higher and Vocational Secondary Education (MH&VSE) in descriptive geometry and engineering graphics and Member of Coordination Board of Main Branch of Mining Institutes, MH&VSE USSR in engineering graphics.

Specialists in engineering graphics of Yakutia State University (North-Eastern Federal University) have made guite significant contributions not only to the Republic itself, but also to RF (former USSR). For example, prominent teaching improvement of graphic disciplines (i.e. descriptive geometry, technical drawing, engineering graphics, etc.) in most education establishments, especially, secondary schools. This involved longterm systematic activities in improving the methodological level and qualification of both teachers and instructors. This was furthered through different courses, seminars, academic Olympics, competitions, etc. among teachers, supervisors of different workshops, as well as, among students of Yakutia and the Republic.



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The first qualification upgrading teacher training courses in graphics and art was conducted in Yakutia in 1963 at the initiative of the Head of Graphic and Technic Drawing Department, N.S. Nikolaev. These were the first 10-day courses conducted only by N.S. Nikolaev. Students (more than 30 from different regions) were highly satisfied. These courses helped many to understand what this subject was, i.e. technic drawing and its importance for students in the country where a new infrastructure was being developed. The second (1966) and third (1969) courses were conducted within the framework of the Department itself. It should be noted that in the Yakutia Republic Extension Course Institute for Teachers (YRECIT) no one worked in the issues of technic drawing as there were no specialists, in the first place, and there was not even a department in technic drawing. In 1970 regular teacher courses in technic drawing were being conducted at the YRECIT in collaboration with specialists under the supervision of N.S. Nikolaev.

Up to 1963 N.S. Nikolaev, intuitu personae, conducted different courses, seminars and workshops for teachers of technic drawing in Yakutia to help them in their school work and to upgrade teacher qualification in order to improve the teaching level of technic drawing in schools and other education institutions (i.e. " stop spinning one's wheels"). It can be said that he "started business from scratch." He worked free of charge, i.e. pro bono publico. Technic drawing was considered to be a neglected subject throughout the country (former USSR), as there were practically no specialists at that time. One should underline the fact that the young teacher N.S. Nikolaev was one of the first graduates of Moscow Technical Institutions from Yakutia: and this could have been the reason why his ideas and initiatives were supported by the Yakutia Ministry of Education, as well as in several schools and education institutions of regional Yakutia Committee of Communist Party of the Soviet Union (CPSU). The first attempt was the so-called workshop in technic drawing

for the teachers of Yakutia, which in its turn, became the first extension course for teachers of different education institutions, including secondary schools. Later, these courses were annually conducted by the Yakutia Republic Extension Course Institute for Teachers (YRECIT), and then in collaboration with staff of Engineering Graphics Department. However, this cases things for a while.

From the 1970's to Soviet collapse, associate professor N.S. Nikolaev conducted more than 100 seminars (free of charge) for teachers of technic drawing in Yakutia travelling from one region to another. More than 2000 participated in these seminars, while his courses embraced more than 3000. These seminars, courses and other workshops were organized by N.S. Nikolaev himself for the Yakutia Republic and it can be stated that they evolved into a school, SCHOOL n.a. N.S. Nikolaev.

From 1962 to 1963 the first school Academic Olympic in Yakutia was organized under the supervision of N.S. Nikolaev. The first two years this Olympic was for only school children of Yakutia, and then in 1964-1965 it was conducted as a Republic Olympic in technic drawing. In 1985 it was granted the status of State Olympic. Such Academic Olympics in technic drawing has no analog in Russia, CIS and even in the world. More than 170000 students from 300 secondary schools of 28 ulus and Yakutai have participated, among which 1415 are prize-winners and runnerrs-up from 105 schools of the Yakutia Republic. Another interesting fact is that more than 200 students from Belorussia, Georgia, Stavropol Territory, Kursk have also participated in these Olympics, either in presentio or in absentia. It is outstanding that these Olympics have been generally recognized.

Many talented and outstanding specialists – engineers, architects, teachers, internationally recognized scientists and even public officials (S.N. Nazarov, A.V. Migalkin, T.T. Savvinov and many others) were among the prizewinners of Professor N.S, Nikolaev Ol-

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ympics (i.e. these Olympics are called "Nikolaev Olympics").

Based on the results of these Olympics and his own personal experience, N.S. Nikolaev began to organize such Olympics in Belorussia, Goergia, Ukraine and in some districts of Moscow and other RF cities (Mineralnye Vody, Kursk, Smolensk and others). Delegates from Georgia (1974), Moscow (1970, 1971, 1981, 1990), Stavropol Territory (1984) and other RF cities studied the experience practice (know-how) in organizing technic drawing Olympics.

It is notable that the USSR Board of Education studied and discussed the obtained experience in organizing and conducting Yakutia Republic School Olympics in technic drawing. Based on the results presented by Professor N.S. Nikolaev (1975 and 1978), special resolutions were adopted to distribute and promote this exclusive experience in Yakutia. According to above-mentioned facts, the following three books were published by Publishing House "Prosveschenie": (1) N. Nikolaev (1981) Implementation of Olympics in Technic Drawing; P. 4, circulation- 3900; (2) V. Okoneshnikov (1984) Technic Drawing Classroom; P. 4, circulation- 3900; (3) N. Nikolaev (1990) Implementation of Olympics in Technic Drawing: P. 10. circulation- 60000. These books were adopted by the USSR Ministry of Education as a teacher manual, and even, today, it is still considered to be reference books for all teachers throughout the Russian Federation and CIS.

It goes without saying that not one book has been published on abovementioned topics yet.

In 1979 under the supervision of Professor N.S. Nikolaev the Yakutia Student Scientific Society (YSSS) in technic drawing was organized within the framework of Yakutia Republic Young Engineer Center, YR Ministry of Education. It should be highlighted that there was no analog in the USSR, and there is no analog today in RF and CIS. This society successfully existed before the Soviet collapse. It is well-known that many members of YSSS became

prize-winners of State Olympics and further became outstanding specialists (engineers, teachers, etc.) and numerous recognized people of Yakutia, who are significantly grateful to their teachers - N.S. Nikolaev, V.N. Okoneshnikov, V.P. Vasilev, V.S. Chirikov and other honoured teachers of Yakutia ASSR, Republic of Sakha (Yakutia).

As a result of long-term systematic teaching improvement of technic drawing in Yakutia education institutions, unprecedented results were achieved. Knowledge and skills in technic drawing of secondary school students and students of education institutions rose to a level incomparable with other RF regions and CIS. There is a prolific in talented teachers of technic drawing throughout the Republic of Sakha (Yakutia) who are graduates of the School n.a. N.S. Nikolaev. Among them are: three honoured teachers of RSFSR and RF: seven -honoured teachers of Republic of Sakha (Yakutia); six- Companions of USSR and RF Orders and Medals. including V.V. Sivtshev awarded Order of People's Friendship: two-honorar citizens of ulus, Republic of Sakha (Yakutia); ten-teacher instructors, Republic of Sakha (Yakutia); one- Doctor of Science: 2-professors: seven- Candidates of Science and associate professors: about 40- exemplary teachers of RSFSR and RF; seven-Companions of Gold Medal n.a. V.P. Larionov, laureates of Foundation of Culture, Education and Science Development in Republic of Sakha (Yakutia).

It is gratifing to emphasize the fact that practically most technic drawing teachers in Republic of Sakha (Yakutia) schools consider themselves to be the followers of prof. N.S. Nikolaev. All the teachers in technic drawing, descriptive geometry and engineering graphics of Yakutia education institutions are proud to state that "their" N.S. Nikolaev was pronounced as one of the 2900 eminent scientists and specialists in Russia, printed in Russian Internet – encyclopedia (www. famous – scientists.ru/1158). This fact shows the recognition of world scientists for Professor's achievements

in domestic science. He was awarded the badge "Eminent Scientists of Russia" and certificate as participate of INTER-NET-Encyclopedia "Eminent Scientists of Russia" (2007-Sochi).

It was vulgarly supposed that if you are a Yakut-you are either a hunter or fisher; in the war years: if you are a Yakut – you are an expert sniper; after war years: if you are a Yakut – you are either an artist or writer and today students say that if you are a Yakut – you are an excellent (outstanding) draftsman. These homely phrases could be possible due to the significant achievements of technic drawing teachers of Yakutia, followers of professor N.S. Nikolaev.

It is not likely that everyone knows such a fact: prof. N.S. Nikolaev was not only a corresponding member of Russian Engineering Academy, a delegate of the First Russian Engineering Congress in Moscow (Kremlin Palace, 2003), but also a participant at the Fifth Forum of Engineers "Planet" in Paris, France (May, 2004). N.S. Nikolaev is the First Yakut Professor in descriptive geometry, which in its turn, was developed by Gaspard Monge, the author of the first textbook in descriptive geometry, the first French professor and academician (one of the closest comrade-in-arms of Napoleon Bonaparte). These facts are by no means accidental or deliberate because no one can be a delegate of such a historical congress and respectable Engineering Forum without due cause. We are proud that we are working sideby-side with professor N.S. Nikolaev. whose SCHOOL is recognized as a topranking one throughout the world.

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