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**BASIC ORGANIZATIONAL FORMS OF TECHNICAL
CREATIVITY IN EXTRACURRICULAR EDUCATIONAL
INSTITUTIONS**

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***Abstract.** At a result of visiting study groups are forming the pupils' technical and technological skills to work with materials, tools, absorbed the basic techniques of design and construction. In the work of study groups various methods of work are used: demonstration of educational films, production excursions, meeting parties, reported parties, thematic parties, exhibitions, technical competition.*

***Keywords:** object-group, courses-group, production group, creative design.*

The main form of organization of creative activity is a study group, a voluntary association of pupils who show a special interest to a particular field of science or technology and want to work practically in it. The basis of the study group is design and construction of the devices, models, technical devices, experimentation, technical and scientific research. Thus, the study group is a place of pupils' creative attempts, inclinations and abilities. The most common form of profile education in extracurricular educational institutions is a study group work. The priority in the organization of extracurricular educational institutions and clubs is providing leisure, development of pupil's creative abilities.

Practical work group, according to I.T.Kucheriavyi, cannot be considered an end in itself. Creating a device or model, young technician should aware clearly at what laws of physics is based an idea, how it works and where can be used [4, p.34].

Only in such conditions the work in the study group will expand pupils' polytechnic horizons. At any technical study group innovative work should be presented and its aim is creation of devices, which facilitate the production of models and instruments, their collection and decoration. The emergence of such proposals shows the development of creative and design-thinking pupils.

And vice versa, creation the most complicated device by the study group is not always indicate the development of technical thinking. Sometimes lack of material and technical base, which is necessary for creation complex models and instruments, scare away managers of extracurricular educational institutions. It should be mentioned that many exhibitions the complex devices and models often push back interesting and pedagogically valuable models of young technicians, made of deep understanding, but with the simplest means and which deserve fair evaluation and recognition.

Organizing an educational process administration of extracurricular educational institution pays great attention to principles which include:

1. Technical creativity is one of the most effective means of organizing pupils' active work and helps to solve educational tasks.

2. The main organizational form of technical creativity is study groups, voluntary associations, based on pupils' technical interests, initiative and independent activity.

3. The center of study group work is an extracurricular educational institution.

4. Special groups reflect the main directions of technological progress, but elements of modern techniques and technologies must be in the activity of any group of young technicians.

5. The work of the technical group is closely connected with life and production.

6. The aim of any technical group is to develop pupils' technical thinking, their creative potential and opportunities.

7. The head of the technical group is an advisor who organizes and directs the pupils' volunteer work.

8. In the presence of active working groups which are closely connected with the production, clubs of young technicians, societies and design bureaus are organized [5, p.197].

Scientific researchers of L.I.Kovbasenko and A.P.Lipetskyi distinguish such types of groups based on technological training:

1. Subject groups which aim is to deepen the knowledge and skills of pupils. So, carpentry, metalwork, electrical and other groups, in which pupils perform complex creative work are the basis of educational workshops. So called physical and technical groups are based on knowledge and skills in Physics and labor training. Pupils produce a variety of physical devices or their models using the skills of material handling and knowledge of construction. Subject group organized by a manager, include several sections. For example, a study group of material processing can include sections of plumbing, carpentry, processing materials and others. Creative relationships are installed between sections and their work become interesting.

2. Out-of-subject groups are standing outside school subjects, although they are based on them. For example, auto and ship modeling. Making models of aircrafts and ships pupils, of course, use the knowledge and skills acquired in the process of technological education, but with the same time they need to acquire new knowledge and skills. The head of the study group must have special training too.

3. Study group courses, in which pupils acquire a profession, take a special place in extracurricular educational institutions. In today's conditions of production there is a need for training specialists of wide profile. A manifestation of this is the so-called Complex Brigade. Each member of it can replace the other one. The manager, on the one hand, should organize the work in the study group on the basis of pupils' inclinations, on the other hand, pupils are not always able to estimate their abilities correctly. Objects of work may be various too, that's why methodological guidance of pupils' activity is complicated, because different work is implemented and there is a need for an

individual or group consultation. That's why the teacher should apply various forms of instruction in study group work: frontal, group and individual.

4. Creative design study groups are generally established for certain types of industrial, building, transport technology, for radio engineering, automation, computing and cybernetics. The most famous are groups of aviation and rocket modeling, ship modeling, road modeling and Radio amateur.

5. Production groups of studying any machinery (e.g., automobile or motorcycle), plumbing, turning, electrical, carpentry and other work.

The material basis for scientific and technological study groups are often considered educational workshops. But sometimes, especially for group courses an industrial base is used [3, p.2].

Self-control is provided in the work of study groups. Members of them choose the head of the study group and sections. Work of study groups calculate for a long period of time (one year or more) [6, p.125].

There are also technical sections or clubs of young technicians. There are amateur clubs of young radio fan, air-modeling, motorists and others in many cities of Ukraine nowadays. This initiative is shown by the majority of palaces of culture, which offer such kind of clubs for young technicians.

It should be noted that extracurricular activities are built on the principles of voluntariness, amateur and collectivity. Participation in it is not compulsory. It involved pupils who wish to learn more about some technical sector of the economy. That's why in determining the content of extracurricular activities much attention is paid to pupils' inclinations. Only in this case their active participation in the study groups can be provided. Pupils often come to the group with their own plans, offer the objects they would like to work at. If possible, it is advisable to meet pupils' initiative. However, we must not forget that pupils sometimes overestimate their capabilities so the manager's task is in the discreet form to help pupils in their choosing the right object to work at. Complex facilities include the large part of existing models, but they are the most interesting for pupils.

To make manufacturing complex objects possible in extracurricular activities the latter may be based on pupils' collective activity. In other words, the amount of work associated with making certain object should be distributed among several pupils according to their abilities and desires.

It should be mentioned that the first step of obtaining extracurricular education is training profile. Such profile is initially-technical, which includes groups of initially and technical modeling, artistic design, mechanical and electrified toys and others. This is the first step to technical creativity. Studying in groups, pupils are introduced to the world of technology, simplest technological process, technical modeling, acquire elementary skills of working with various materials and tools. At the first level the pupils' strong interest to technical creativity is forming and labor culture is developing. It should be noted that the structure of scientific and technical directing of extracurricular education exist many clubs and creative associations of sports-technical profile.

Among them study groups of: air-modeling, motor-car modeling, rocket modeling, ship modeling, karting, radio sport, operators of collective radio stations and others. Visiting such groups, pupils become acquainted with their history, achievements and prospects of development. In these groups technical and technological skills to work with materials, tools are developing, the basic techniques of design, construction and usage of technologies in mechanical engineering are learning. Work in study groups provides strong interest in scientific and technical creativity, gaining personal experience, development of spatial and logical thinking, memory, imagination, hearing and coordination of movements.

Scientific and technological study groups and other creative associations of subject-technical type of radio electronics, cybernetics, astronomy and scientific circles of technical profile occupy an important place. The content of their work foresees deepen studying and learning theoretical chapters of science and development of skills of design activities where special importance acquires the pupils' involvement in scientific and practical work [7, p.75].

Studying in the *object-group* of scientific and technical work, pupils learn the knowledge of work with various materials, their varieties, decorative properties, acquire special equipment and technology, including study groups of motor-car modeling, air-modeling, rocket modeling and ship modeling.

Work of *courses-groups* is made according to principles of integration secondary school and extracurricular education, the implementation of interdisciplinary connections and reliance on basic knowledge of physics, mathematics, labor training. The leading role is given to the formation of pupils' linguistic culture, mastering technical terminology and the ability to use it in solving creative tasks. In each class, which combines theoretical knowledge and practical work, a variety of learning tools is used (visual aids, handouts, technological cards, technological means of studying). Checking pupils' knowledge and skills is made during fulfilling their practical work, conducting quizzes, participation in competitions, final exhibitions and other forms of educational activities. The head of the group can make changes to the content of the program when planning the work for the academic year, taking into account pupils' interests, condition of the material and technical basis and educational level of the pupils and can determine the amount of hours they need to master a subject and make some adjustments to the program [8, p.206].

In the *production group* of technical design lessons of technical construction are held, including the usage of ready-made sets; construction of the simplest, but existing model-copies and model-fantasies of various transport, industrial, building and agricultural machines. These classes provide the development of pupils' intelligence and interest for technique, expand technical outlook. Such groups include practical work in laboratories, workshops and industrial enterprises.

All practical work in scientific and technological groups creates conditions for improving the content of pupils' technical creativity, their intensive

familiarization with industrial subjects according to the profile of technological learning, which is important for strengthening and deepening pupils' technical knowledge and improving their skills.

Studying at *creative design groups*, pupils develop technical and technological projects, radio electronic devices, read technical documentation, acquire graphic skills while making sketches and technical drawings. These are groups of young designers of radio electronics devices and design, space prototyping and modeling. Knowledge gained by pupils, help them to navigate the world of modern technic, promote the development of their creative activity, independence and purposefulness. Development of pupils' design abilities is one of the major challenges facing the creative design group.

Study groups use various methods in their work. Thus, demonstration of educational films has a significant effect when conducted in the form of multimedia lectures. Production excursions deepen pupils' knowledge of scientific and technical creativity and expend their ideas about the basis of modern production. Very popular in extracurricular education is meeting party with foremost people in industry, at which both pupils and guests speak. An effective measure for encouraging group work is a reported party, for which all members of the group are prepared, demonstrating their products. After such parties the number of pupils who want to participate in extracurricular activities is increasing.

Thematic party of scientific and technological groups are organized for all pupils in the field of science and technology. They are valuable for pupils because attract them to acquire knowledge in technique. Such parties are of great importance for pupils because the latest are preparing for speeches, working out a lot of literature and learning about new technical facilities and processes.

Exhibitions, at which the work of pupils is displayed can be temporary and permanent. In preparation for the exhibition pupils discuss the best works and decide which ones are appropriate to submit. At exhibition the authors give explanations as for principles of making them objects. Conducting technical competitions increases both the activity of teachers and pupils. Their interest for practical activities increases. Competitions contribute to improving pupils' technical skills and encourage them for searching new creative ideas for project work.

Leaders of groups gain valuable experience during such lessons as: fair of workplaces (presentation of professional capabilities of schools, institutions of higher education for pupils of Grades 9,11); program "Professional", which are realized through the participation of pupils, listeners in creative, business, communication games; as well as interactive games "Constructing Information Models", "Fundamentals of Engineering Graphics"; creative projects "Office Technologies", "System Programming", "Basic vocational guidance", "Computer Design" and others [1, p.12].

Such scientific and technical direction of extracurricular educational institution's work provides pupils of technical and technological abilities and skills, expanding scientific outlook, preparation for scientific research, mastering of modern technology and technologies [2, p.36].

Different forms of organization scientific and technical direction in extracurricular educational institutions is a part of the educational process. This is one of the most effective ways of development creatively directed personality. That is why the organization of various groups, sections and studios in extracurricular education needs special attention from the administration and district education departments. The effectiveness extracurricular educational institutions depends on their clear and deliberate organization, planning and coordination.

References translated and transliterated

1. Verbytskyi V. V. (2009) Aktyvizatsiya tvorchoi i piznavalnoi diyalnosti vyhovantsiv pozashkilnykh zakladiv cherez vykorystanna suchasnyh pedagogichnyh tehnologij [Activation of creative and cognitive activity of pupils of extracurricular educational institutions through the usage of modern educational technologies]. - *Osvita – Education*, 31-32. – 3 [in Ukrainian].
2. Kepsha Ya.S. (2000) Upravlinnya navchalno-vyhovnym procesom v pozashkilnomu navchalnomu zakladi tekhnichnogo profily [Management of the educational process in the extracurricular educational institutions of technical profile]: Ya.S.Kepsha *Proceedings of the scientific and practical conference of teachers and students of Ternopilskiy pedagogic institute of general technical disciplines*: Ternopil, 34–37 [in Ukrainian].
3. Kovbasenko L.I. (2003) Organizacijno-pedagogichni osnovy diyalnosti suchasnogo pozashkilnogo navchalnogo zakladu [Organization-pedagogical basis of the activity of modern extracurricular educational institution]. *Shkilnyj svit – School World*, 22-24. – 2 [in Ukrainian].
4. Kucheriavyi I.T. (2000) *Tvorchist – osnova rozvytku potencijnyh dzherel osobystosti* [Creativity is the basis of development of personality's potential sources]. - Kyiv: Navchalnyj posibnyk – Tutorial, 288 [in Ukrainian].
5. Lypetskyi O. P. (2010) Rozvytok tvorchyh zdibnostej uchniv u texnichnyh gurtkah pozashkilnyh navchalnyh zakladiv [The development of pupils' creative abilities in technical study groups of extracurricular educational institutions]. Kyiv: *Navchannya i vyhovannya obdarovanoyi dytyny: teoriya i praktyka : zbirnyk naukovykh pracz – Training and education of gifted child: theory and practice: scientific research journal*, 3. – 236–243 [in Ukrainian].
6. Lytovchenko O.V. (2009) Yakist pozashkilnoyi osvity: kategoriyi i pidhody [The quality of extracurricular education: categories and approaches]. Kyiv: *Naukovyj chasopys Nacionalnogo pedagogichnogo universytetu imeni M. P. Dragomanova – Science magazine of National Pedagogical University M.P.Dragomanov*, 16. – 120-125 [in Ukrainian].

7. Pustovit G.P. (2010) *Pozashkilna osvita i vyhovannya: teoretyko-dydaktychnyj aspekt* [Extracurricular education: theoretical and didactic aspect]. Monografiya – Monography, 1.– 379 [in Ukrainian].
8. Tkhorzhevskiy D.O. (1992) *Metodyka trudovogo i profesijnogo navchannya* [Methods of work and professional training]. - Kyiv: 331 [in Ukrainian].

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**PROSPECTS OF THE UKRAINIAN NATIONAL IDENTITY
FORMATION BY MEANS OF CULTURAL POLICY AND PATRIOTIC
EDUCATION**

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Abstract. *The current status and level of national identity in Ukraine are analyzed. The State cultural policy problems and threats to outside informational influence are distinguished. The potential of historical knowledge and tradition in Ukraine, which is not completely used to fight the Russian aggression and the Ukrainian society consolidation are observed in the Study. Children and young people, identified as the main target group, which should be directed by the activities of humanitarian policy.*

Keywords: *identity, ethnic culture, national memory, tradition.*

Introduction. Today Ukraine is against powerful information campaign aimed at provoking enmity and splitting of the Ukrainian society. This information is based on aggression deliberately formed by the Communist regime of the USSR historical stereotypes and myths, aimed at distortions of historical events and speculative abuse of the formation of the Ukrainian identity, the Ukrainian denial ethnic culture as a separate phenomenon. Manipulation of historical facts are used to justify aggression of Russia against Ukraine. This policy is a threat to national security of Ukraine, as the aims to destabilize the political situation in the country, provoking a split of the Ukrainian society and a discredit of the independence of Ukraine and its European integration. The above situation makes Ukrainian cultural policy to implement and protect national interests in the sphere of national identity. Coherent state policy must be aimed at restoring and preserving the national memory.

Review. After the independence, Ukraine has come up to a new period in the study of cultural development problems of the state creating, within which there is intense revision of historical experience on the subject. Various aspects of this issue are defined in the articles of A.Vyhrusch, L.Vovk, V.Kravtsya, S.Mayborody, I.Myhaylovoyi, P.Sytnyka, V.Skurativskoho, S.Skydan, D.Trohevskoho, V.Troschynskoho, N.Rotar and others.