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# **Processes Of Learning And Teaching Multiple Subjects In Higher Education Institutions**

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**Abstract**: In our country In HEIs lots of shoe topics are taught in the process there are problems and practical affairs about data given

**Keywords:** Kopyaks, student, High education institution, drawing, Chizmageometry, views, sides, pyramid, engineering, drawing, form.

Most solids take the form of faceted, sided, and pointed polyhedra, and are bounded by legs in the closed state. In ancient times, people tried to create various objects and structures to satisfy their needs. Theirs all, almost, a lot positive was For example, ancient in Egypt built from ( pyramid ) and they are with depends has been buildings, structures such as Even now, for example, construction brick - prism ( parallelepiped ), different luxurious buildings form to polynomials like will be built. In life polynomials very lot examples that an

During the research period, the cases of teaching polygyny in higher educational institutions of the Russian Federation were studied and the following were determined. When we studied the educational portal of the Russian Federation, textbooks and study guides for schoolchildren widely provided materials about regular and semi-regular plurals. Also, the information about the use of polyps in various sectors of the national economy is given widely and sufficiently. On educational portals, you can see assignments completed by schoolchildren and students of the Russian Federation on semi-regular polynomials.

During the period of the conducted research, the cases of teaching the topic of polynomials were studied. During the study period, hours were allocated to the subject of polynomials in science programs of bachelor's programs at higher technical universities. However, the allocated hours do not give the full information about the polynomials. Analyzing the educational literature on drawing geometry and engineering graphics, the materials on the topic of polyhedra are mainly regular polyhedra, i.e., tetrahedron, octahedron, hexahedron (cube), icosahedron and dodecahedron, and non-regular polyhedra. given about 'legs. Also, the books of Sh. Murodov, R. Khorunov, and other authors on "Drawing geometry" contain materials on the above-mentioned topics. These materials do not contain information about semiregular polynomials.

During the research period, even in internet searches about semi-regular polynomials, it was not possible to find materials in Uzbek about semi-regular polynomials and their use in architecture and technology. In the Uzbek language, among the materials, there are works on regular polynomials, mostly on mathematics. There are no works on the drawing geometry of semiregular polynomials. Considering that regular and semi-regular polynomials are used in technology, architecture, our daily lives, and the study of chemistry and physics, we considered it necessary to study these polynomials.

60730300 - Construction of buildings and structures (industrial and civil buildings), 60730200 - Urban construction and organization and management of municipal infrastructure,



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Architecture education programs, plurals There is very little information about regular plurals within the subject. However, information about semiregular polynomials is not included.

It follows from the information given above that it is advisable to expand the topic of kopyok for students studying in the field of Architecture. Modern architecture is increasingly referring to semiregular polynomials.

With the introduction of modern informational and pedagogical methods of teaching into the educational process, effective lessons are ensured as a result of their application. Modern teaching methods are as follows: conference lessons, seminar lessons, teaching with the help of technical means, artistic study, thinking (eureka), teaching related to profession, experimental lessons, a debate classes.

Education (teaching) as an integral part of cognitive activity takes place based on the general laws of knowledge of the world around a person. For this reason, it is necessary to implement it as a whole in the process of teaching, educating, and raising a person into a perfect generation. Only when the teacher is aware of the principles of education, he will be able to manage it effectively and choose the effective methods of teaching. In teaching, the educational principles are the determining factor of the teacher's activity and the nature of the student's knowledge activity.

#### Education principles ( principles ) :

- t of my education to be scientific ;
- t to connect theory and practice in education ;
- awareness and active action in education ;
- t of my education use of educational opportunities;
- demonstration of the educational process;
- thorough and systematic acquisition of knowledge;
- democratization and humanization of the educational process and system;
- t my education individualization ( single ) principle.

In modern education, the teacher should know and be able to apply the most effective innovative methods. Innovation is a Latin word that means "introducing, implementing, changing". Modern innovative methods of education:

- Modeling ( training );
- Demonstration to do
- Small groups work
- Mental attack
- Critical thinking;
- Debates ;
- Rolly games ;
- Certain changes in the situation ;
- Modified lecture ;
- Games ;
- Information with the help of technologies ( computer ).



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Teachers' innovative methods used to know and to practice apply take for the following placed to innovative requirements answer give to take it is necessary

- innovative technology concept his content and essence to know
- innovative technologies education purpose did increase place and role to know
- innovative technologies in science apply principles to know
- educational and diligence games to know
- problematic developing education methods to know
- of students' independent activities organize and provide ways to know
- of students own independent performance skills increase methods to know
- demonstrative teaching methods to know and possession ;
- Pedagogical technologies supporting, exemplary imitation study training to pass
- of education activator methods to know and take over need

Some innovation method Let's look at the essence of types :

#### 1. Modeling ( training-exercise do )

Teaching this method own into real life again recovery for work developed device, tool or situation own into takes

#### **Application :**

- various situations need to be skilled in the application ;
- operational skills and decision-making;
- applying previously established principles in real-life situations.

#### Advantage:

- increases student activity,
- enhances memory.

#### 2. Demonstration:

Demonstration means "I will show, I will prove". In the demonstration method, the teacher completes the task and shows the students how to complete the task. After the demonstration method, students should be allowed to try the task.

#### **Application:**

- to show how to complete the task;

- teaching problem-solving and analytical skills;
- in teaching safety techniques.
- teaching how to work with technical equipment and tools.

#### Advantage:

- the student sees and hears;
- understanding and remembering to stay help will give ;
- interest increases ;
- of teaching active shape

#### 3. Rolly games

Teaching this method to students in "real life " situations again revives practical work the method of role-playing in activities I apply has been new kind of activities try to see and check possible will have

#### **Application :**



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- new kind of activity to try to enable showing ;

- students' theory to practice supporting to see in teaching ;

- students' activity more in increasing

#### Advantage :

of "real life ". again recovery;

- of students to the topic deeper attraction to be done ;

- of students to the problem with different approaches to see enable to give

**4. Using information technology ( computer ).** of **teaching** this method above telling passed all innovative methods own into cover take can

Combining new pedagogical technologies with modern information technology provides practical support for the effectiveness of the educational process. Drawing geometry using computer technology and graphics has become an urgent problem in the higher education system. As a result of the improvement of modern information tools, software-pedagogical tools are also developing very quickly. Therefore, it is necessary to determine the didactic requirements of modern pedagogical and didactic tools, that is, "electronic textbooks". We believe that it is necessary to consider the problems of using software-pedagogical tools and computer graphics in educational training and independent work processes.

Pedagogical aspects of information and communication technologies are quite diverse. Human-computer interactions, laws of human-computer dialogue, reception and processing, and emotional impact of EHMs were studied by Ye.I.Mashbits, OKTikhomirov.

The use of multimedia technologies in teaching the subject of polynomials provides an opportunity to provide students with all materials on the subject of polynomials. Multimedia technologies provide an opportunity to visually present materials. Venn diagrams are more effective than other techniques when dealing with the subject of polynomials.

#### **Used books**

1. A.Xamrakulov. "Chizma geometriya va muhandislik grafikasi" o'quv dasturi. 60730300 – Bino va inshootlar qurilishi (sanoat va fuqaro binolari) ta'lim yo'nalishlari uchun. Namangan, 2022

2. K.Madumarov. "Chizma geometriya va muhandislik grafikasi" o'quv dasturi. 60730200 – Shahar qurilishi hamda kommunal infratuzilmani tashkil etish va boshqarish ta'lim yo'nalishlari uchun. Namangan, 2022

3. Хамракулов А.К. "«Чизма геометрияни ўқитишда компьютер технологияларини қўллаш методикаси (чизма геометрия ва муҳандислик графикаси фани мисолида)»" диссертация. Тошкент 2009й

4. Машбиц Е.И. Психолого-педагогические аспекты компьютеризации. // Вестник высшей школы. – М. 2008. -№4

5. Тихомиров О.К., Бабанин Л.Н. ЭВМ и новые проблемы психологии. -М.: МГУ, 2007. - 203 с



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