



## DEVELOPMENT OF ENGINEERING GRAPHICS STUDENTS TO CREATIVITY THROUGH IMAGINATION VIEWS

*Shokhista Sindarova Makhammatovna - assistant of TTYeSI  
E-mail: shohistasindarova@gmail.com*

**Abstract:** It consists in creating conditions for improving the creative structure of young people. The specialists are students of higher education who directly train artists, identify and develop blindness in students.

**Key words:** Views, imagination, projection, object, method, creativity, possibilities, graphic image, image.

How do we create six basic views?

Let's call it the glass box method

1. The object is placed in a glass box.

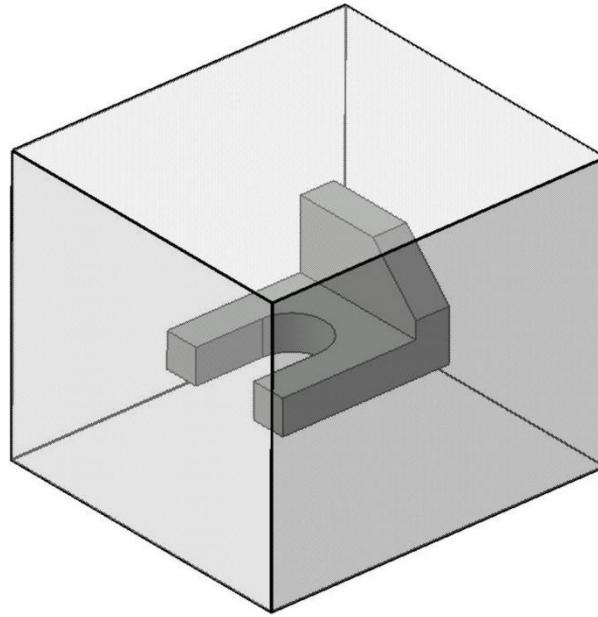
2. The image of the object is projected onto the sides of the box.

3. The box is opened.

4. The sides of the box are the main view.

"Glass box method" In this method, in developing the students' imagination, it is possible to clearly show the six views through their images in the glass.

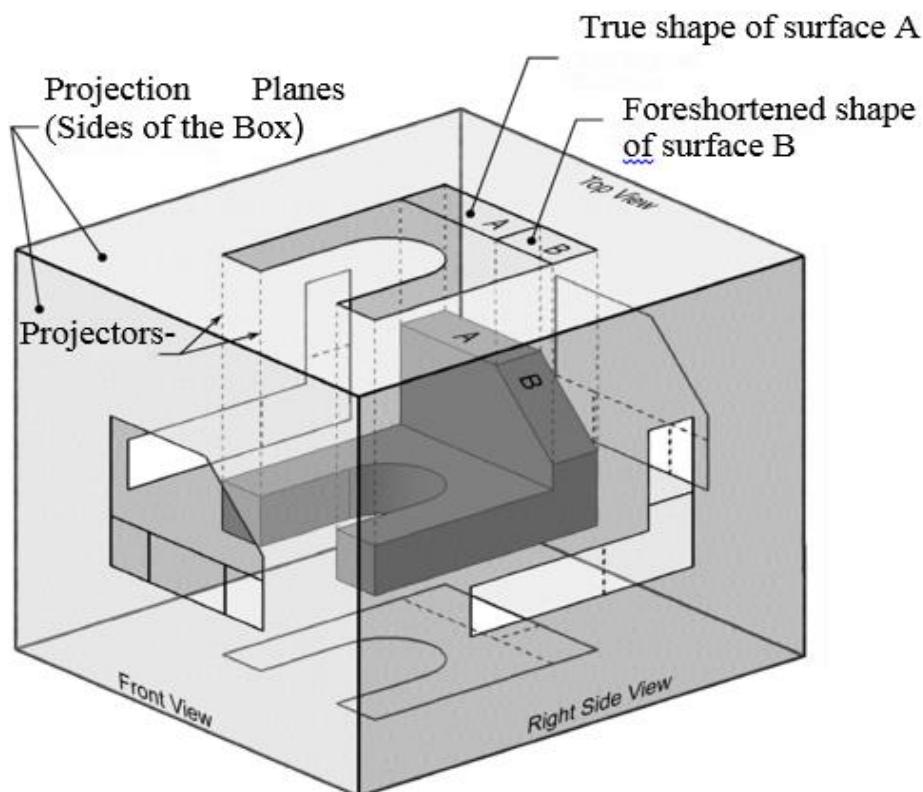
The object is placed in a glass case. The sides of the box represent the 6 main planes. The object's image is projected onto the sides of the box.



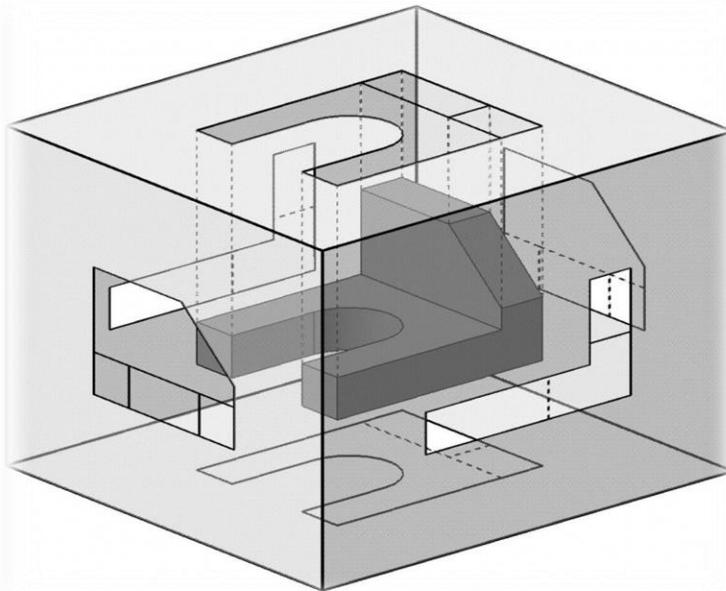
### Projection planes.

How are surfaces A and B projected? We will consider these aspects.

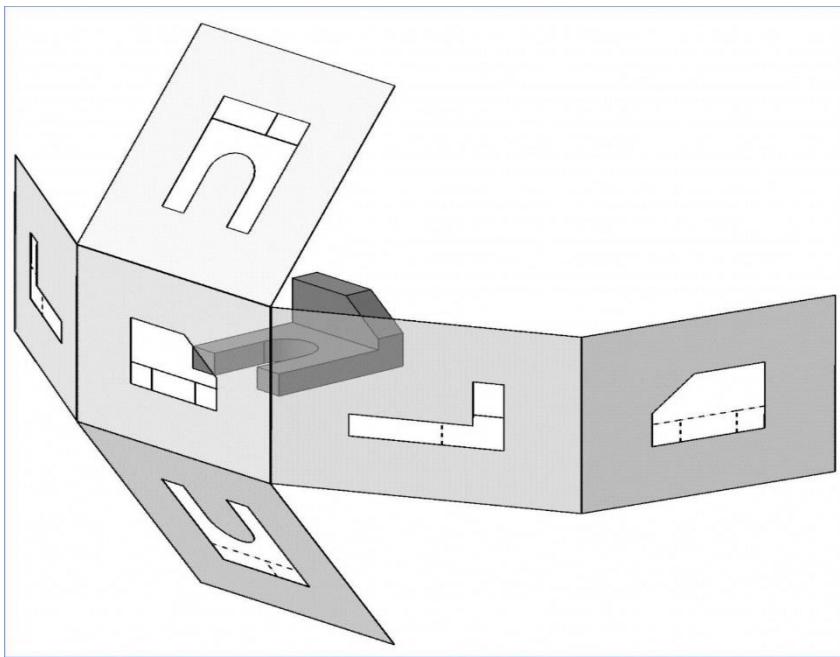
As shown in the example, the views are satisfied by the correct projection method, regardless of the location of the sides in the plane.



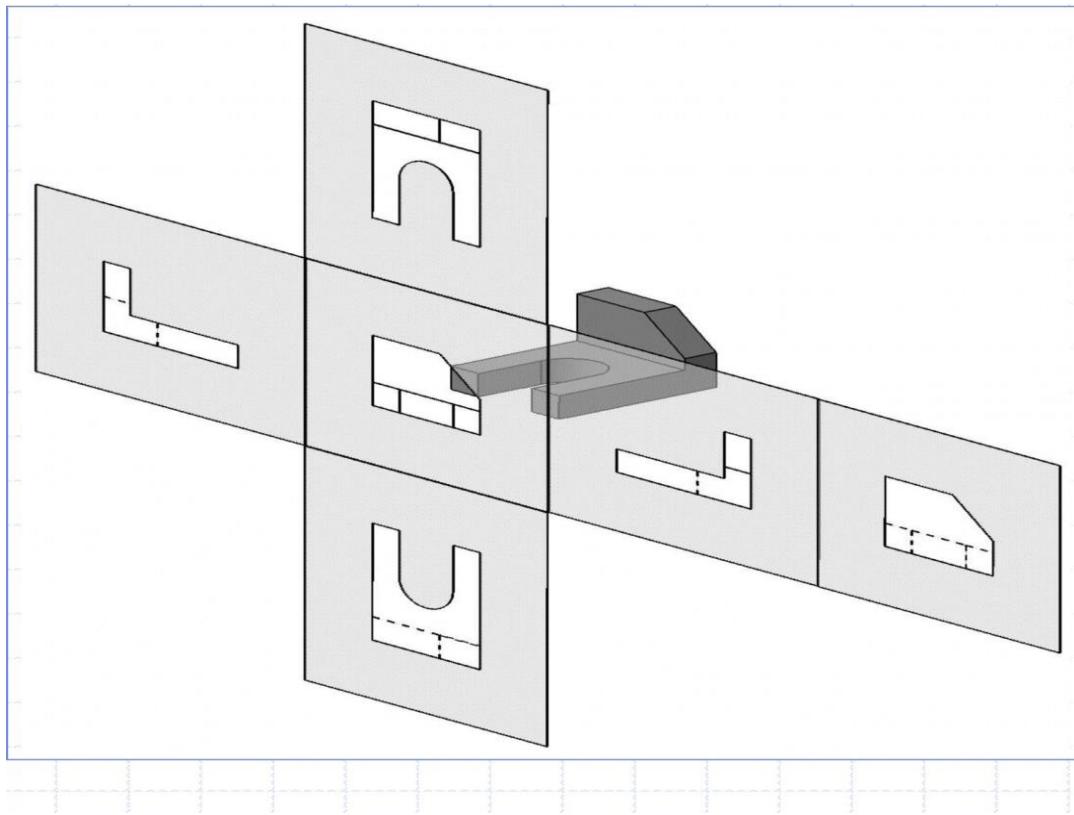
The box opens to reveal 6 main views. In the process of opening these views, the student's imagination develops through what kind of drawing the student creates



Xosil bo'lgan asosiy ko'rinishlarni tegishli nomlar bilan belgilash lozim bo'ladi. talaba shu orqali nomlarini o'rganib, detallarni qanday joylashtirish va ularni belgilashni tasavvur qilib boradilar.



These step-by-step visualizations help to increase imagination and the ability to imagine, which is the main content of engineering graphics.





In order to improve the creative ability of students, the ability to visualize given geometric objects in space increases if the problems that require creative research and visual test options are used. At this stage of solving the problem, students increase their imagination and understand the essence of the drawings

In conclusion, it should be emphasized that early identification of creative young people and realization of their talent, relying on the heritage of our great scientists who formed the foundations of our society and the foundations of our society, creating skills and qualifications to create great discoveries that serve the well-being of the people based on the requirements of today's times is of great importance.

#### **List of used literature.**

1. Sindarova, S. M., Rikhsibaev, U. T., & Khalilova, H. E. (2022). THE NEED TO RESEARCH AND USE ADVANCED PEDAGOGICAL TECHNOLOGIES IN THE DEVELOPMENT OF STUDENTS'CREATIVE RESEARCH. Academic research in modern science, 1(12), 34-40.
2. Mirzaliev, Z., Sindarova, S., & Eraliyeva, S. (2019). Organization of Independent Work of Students on Drawing for Implementation of the Practice-Oriented Approach in Training. International Journal of Progressive Sciences and Technologies, 17(1), 297-298.
3. Sindarova, Shoxista Maxamatovna (2021). O'YINLI TEXNOLOGIYALARDAN FOYDALANISH ORQALI O'QUVCHILARNING BILIM, KO'NIKMA VA MALAKALARINI SHAKLLANTIRISH (CHIZMACHILIK FANI MISOLIDA). Oriental renaissance: Innovative, educational, natural and social sciences, 1 (11), 686-691.
4. Maxamatovna, S. S. (2022). Methods of Solving Some Problems of Teaching Engineering Graphics. Spanish Journal of Innovation and Integrity, 7, 97-102.
5. Рихсибов, У. Т., Халилова, Х. Э., & Синдарова, Ш. М. (2022). AutoCAD дастуридан фойдаланиб деталлардаги ўтиш чизикларини қуришни автоматлаштириш. Science and Education, 3(4), 534-541.
6. Bobomurotov, T. G., & Rikhsiboev, U. T. (2022). Fundamentals Of Designing Triangles Into Sections Equal 5, 7, 9, 11, 13, 15, 17 And 19. Central Asian Journal of Theoretical and Applied Science, 3(2), 96-101.
7. Makhammatovna, S. S. (2023). Pedagogical and Psychological Aspects of Improving the Methods of Developing Students' Creative Research. Web of Semantic: Universal Journal on Innovative Education, 2(3), 37-41.



8. Abdurahimova, F. A., Ibrohimova, D. N. Q., Sindarova, S. M., & Pardayev, M. S. O. G. L. (2022). Trikotaj mahsulotlar ishlab chiqarish uchun paxta va ipak ipini tayyorlash va foydalanish texnologiyasi. *Science and Education*, 3(4), 448-452.
9. Sindarova, S. (2023). TALABALARDA IJODIY IZLANUVCHANLIKKA XOS SIFATLARNI SHAKILLANTIRISH USULLARI. *Академические исследования в современной науке*, 2(11), 23-29.
10. Sindarova Shoxista Maxamatovna, & Maxmudov Abdunabi Abdug‘afforovich (2022). MUHANDISLIK GRAFIKASI FANLARINI O‘QITISHDA IJODIY IZLANISH TALAB QILINADIGAN MASALALAR. *Ta’lim fidoyilari*, 24 (17), 2-275-284.
11. Rixsiboyev, U. T., & Maxamatovna, S. S. (2023). TEXNOLOGIK VOSITALAR ORQALI INNOVATSION DARS TASHKIL QILISH. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 20(8), 168-175.
12. Shoxista, S. Abdug‘afarovich, MA (2022). METHODOLOGY OF STUDENT CAPACITY DEVELOPMENT IN TEACHING ENGINEERING GRAPHICS. *Gospodarka i Innowacje*, 22, 557-560.
13. Sindarova, S. (2023). AUTOCAD DASTURIDAN FOYDALANIB TALABALARNING IJODIY IZLANISHLARINI RIVOJLANTIRISH. *Наука и технология в современном мире*, 2(14), 38-41.
14. Mirzaliyev, Z. E., Sindarova, S., & Eraliyeva, S. Z. (2021). Develop students' knowledge, skills and competencies through the use of game technology in the teaching of school drawing. *American Journal of Social and Humanitarian Research*, 2(1), 58-62.
15. Sindarova, S. M. (2021). IQTIDORLI TALABALAR BILAN SHUG’ULLANISH METODIKASI.(MUHANDISLIK FANLARI MISOLIDA). *Oriental renaissance: Innovative, educational, natural and social sciences*, 1(8), 32-39.
16. Shoxista, S. (2023). MUHANDISLIK GRAFIKASI FANINI O‘ZLASHTIRISHDA ZAMONAVIY DASTURDAN FOYDALANISH ORQALI TALABALAR IJODKORLIGINI RIVOJLANTIRISH. *Innovations in Technology and Science Education*, 2(9), 780-790.
17. Синдарова, Ш. (2023). Yosh ijodkorlarni qo‘llab quvvatlash va ular bilan ishslashni tashkil qilish. *Общество и инновации*, 4(2), 177-181.