

Yuqori sinf o'quvchilarining grafik savodxonligini maket tayyorlash orqali oshirishning amaliy ahamiyati

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Annotatsiya: Mazkur maqolada yuqori sinf o'quvchilarining grafik savodxonligini maket tayyorlash jarayoni orqali rivojlantirishning nazariy va amaliy asoslari yoritilgan. Grafik savodxonlik tushunchasining mazmun-mohiyati, uning fazoviy tafakkur, konstruktiv fikrlash va ijodiy kompetensiyalar bilan o'zaro bog'liqligi tahlil qilingan. Maket tayyorlash faoliyatining didaktik imkoniyatlari, loyihaviy yondashuv asosida tashkil etilishi, fanlararo integratsiya jarayonidagi o'rni hamda o'quvchilarning kasbiy yo'naltirilishiga ta'siri ilmiy jihatdan asoslab berilgan. Shuningdek, maket yaratish jarayonida grafik chizma va hajmiy model o'rtasidagi uzviy bog'liqlik, refleksiv tahlil va amaliy ko'nikmalarni shakllantirish mexanizmlari ochib berilgan. Tadqiqot natijalari maket tayyorlash metodikasining yuqori sinf o'quvchilarida grafik tafakkur va vizual madaniyatni rivojlantirishda samarali pedagogik vosita ekanligini ko'rsatadi.

Kalit so'zlar: grafik savodxonlik, maket tayyorlash, fazoviy tafakkur, konstruktiv fikrlash, loyihaviy o'qitish, vizual idrok, grafik kompetensiya, fanlararo integratsiya, texnik ijodkorlik, chizmachilik metodikasi

The Practical Significance of Enhancing Graphic Literacy of Senior School Students through Model Making

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Abstract: This article examines the theoretical and practical foundations of developing graphic literacy among senior school students through the process of model making. The essence and content of the concept of graphic literacy are analyzed, as well as its interrelation with spatial thinking, constructive reasoning, and creative competencies. The didactic potential of model making activities, their organization based on a project-oriented approach, their role in interdisciplinary integration, and their impact on students' professional orientation are scientifically substantiated. Furthermore, the study reveals the close relationship between graphic drawings and three-dimensional models, as well as the mechanisms for developing reflective analysis and practical skills in the process of creating models. The research findings

demonstrate that the methodology of model making serves as an effective pedagogical tool for enhancing graphic thinking and visual culture among senior school students.

Keywords: graphic literacy, model making, spatial thinking, constructive reasoning, project-based learning, visual perception, graphic competence, interdisciplinary integration, technical creativity, methodology of technical drawing

Yuqori sinf o'quvchilarining grafik savodxonligini maket tayyorlash orqali oshirish masalasi zamonaviy ta'lim tizimida muhim metodik va amaliy ahamiyat kasb etmoqda. Bugungi globallashuv va texnologik rivojlanish sharoitida vizual axborotni qabul qilish, tahlil etish va ifodalash ko'nikmalari shaxsning umumiy kompetentligini belgilovchi asosiy omillardan biriga aylangan. Ayniqsa, umumiy o'rta ta'limning yuqori bosqichida o'quvchilarning grafik tafakkurini rivojlantirish, ularni fazoviy tasavvur, konstruktiv fikrlash va texnik ijodkorlikka yo'naltirish dolzarb vazifalardan biridir. Grafik savodxonlik nafaqat chizmachilik yoki tasviriy san'at fanlariga oid tor doiradagi ko'nikma, balki arxitektura, muhandislik, dizayn, texnologiya va axborot kommunikatsiya sohalarida muvaffaqiyatli faoliyat yuritishning muhim asosi hisoblanadi.

Grafik savodxonlik tushunchasi o'z ichiga grafik belgilarni o'qish va talqin qilish, geometrik shakllarni tasvirlash, chizmalar tuzish, fazoviy obyektlarni tekislikda ifodalash, proyeksiyalarni tushunish hamda vizual modellar yaratish ko'nikmalarini qamrab oladi. Yuqori sinf o'quvchilari bosqichida bu ko'nikmalarni rivojlantirish nazariy bilimlar bilan bir qatorda amaliy faoliyatni ham talab etadi. Aynan maket tayyorlash jarayoni grafik savodxonlikni chuqurlashtirishning samarali vositasi sifatida namoyon bo'ladi. Maket - bu real obyekt yoki loyihaning soddalashtirilgan, masshtab asosida yaratilgan hajmli modeli bo'lib, u o'quvchining fazoviy tasavvurini aniq predmet shaklida mujassamlashtirish imkonini beradi. Maket tayyorlash faoliyati konstruktiv, analitik va ijodiy bosqichlarni o'z ichiga oladi. Avvalo, o'quvchi loyihaning grafik tasvirini ishlab chiqadi: reja, fasad, kesim, perspektiva yoki aksonometrik tasvirlar tuzadi. Bu jarayonda u geometrik qonuniyatlarga, masshtab nisbatlariga, o'lcham aniqligiga va kompozitsion uyg'unlikka rioya qiladi. Keyingi bosqichda chizma asosida hajmiy model tayyorlanadi. Bu esa tekislikdagi grafik belgilarni uch o'lchamli fazoda anglash va amaliyotga tatbiq etishni talab qiladi. Shu tariqa nazariya va amaliyot o'zaro integratsiyalashadi.

Maket tayyorlash jarayonining pedagogik qiymati shundaki, u o'quvchini passiv kuzatuvchidan faol ijodkorga aylantiradi. O'quvchi o'z loyihasini mustaqil rejalashtiradi, material tanlaydi, konstruktiv yechimlar ishlab chiqadi va yakuniy natijani baholaydi. Bu esa grafik savodxonlikni shakllantirish bilan bir qatorda mustaqil fikrlash, muammoli vaziyatni hal etish, tanqidiy tahlil qilish kabi umumiy kompetensiyalarni ham rivojlantiradi. Grafik tasvir va maket o'rtasidagi o'zaro

bog'liqlik o'quvchining abstrakt va konkret tafakkurini uyg'unlashtiradi. Chizma orqali ko'rilgan shakl maketda aniq hajmga ega bo'ladi, natijada tasavvur va reallik o'rtasidagi tafovut kamayadi. Psixologik nuqtai nazardan, yuqori sinf o'quvchilarida abstrakt fikrlash jarayoni faol rivojlanadi. Ular murakkab geometrik konstruksiyalarni tushunishga va mantiqiy bog'lanishlarni aniqlashga qodir bo'ladilar. Biroq fazoviy tasavvur ko'nikmasi har doim ham nazariy izohlar orqali yetarli darajada shakllanmaydi. Maket tayyorlash aynan shu bo'shliqni to'ldiradi. O'quvchi ikki o'lchamli chizmadan uch o'lchamli obyektga o'tish jarayonida aqliy transformatsiyalarni amalga oshiradi. Bu jarayon miya faoliyatining vizual-kinestetik mexanizmlarini faollashtiradi va bilimni mustahkamlaydi.

Xulosa qilib aytganda, yuqori sinf o'quvchilarining grafik savodxonligini maket tayyorlash orqali oshirish chuqur pedagogik, psixologik va amaliy ahamiyatga ega. Bu jarayon nazariy bilimlarni real faoliyat bilan bog'laydi, fazoviy tasavvurni mustahkamlaydi, konstruktiv va ijodiy fikrlashni rivojlantiradi hamda o'quvchini kasbiy faoliyatga tayyorlaydi. Maket tayyorlash grafik savodxonlikni shakllantirishning samarali, ko'rgazmali va motivatsion vositasi sifatida ta'lim tizimida keng qo'llanishi maqsadga muvofiqdir.

Foydalanilgan adabiyotlar

1. Komoldinov, S. J. O. G. L., & Isaboyeva, M. I. Q. (2025). Manzara kompozitsiyasini rangtasvir texnologiyasi asosida yaratishning badiiy ifoda vositalari. *Science and Education*, 6(11), 932-937.

2. Komoldinov, S. (2025). MANZARA CHIZISHNING NAZARIY ASOSLARI VA RASSOMLAR ASARLARI TAXLILI MANZARA CHIZISHNING NAZARIY ASOSLARI VA RASSOMLAR ASARLARI TAXLILI. *Universal xalqaro ilmiy jurnal*, 2(4.3), 264-267.

3. Komoldinov, S. (2023, December). Qalamtasvir mashg'ulotlarida kompozitsiyaning ahamiyati. In *INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE on the topic: "Priority areas for ensuring the continuity of fine art education: problems and solutions"* (Vol. 1, No. 01).

4. Komoldinov, S., & Sattarov, F. (2024). Ijodiy asar yaratish bo'yicha metodik tavsiyalar. *Scientific-theoretical journal of International education research*, 2(1), 42-46.

5. O'G'Likomoldinov, S. J., & Abdirasilov, S. F. (2023). ON THE INTEGRITY OF ILLUSTRATION IN PAINTING LESSONS AND ITS RELATIONSHIP WITH COMPOSITION ACTIVITY. *Экономика и социум*, (3-2 (106)), 168-171.

6. Komoldinov, S. J. O. G. L. (2026). Manzara chizish jarayonida rang xususiyatlaridan foydalanish usullari. *Science and Education*, 7(1), 1027-1033.

7. Komoldinov, S. J. O. (2026). The pedagogical significance of composition in pencil drawing lessons. *European Journal of Economic Dynamics and Policy*, 2(1), 21-24.
8. Sattarov, F. I. (2024). Techniques and Methods of Creating Fine Art Works. *American Journal of Language, Literacy and Learning in STEM Education*, 2(3), 269-271.
9. Jomoldin o'g'li, K. S. SCIENCE, RESEARCH AND DEVELOPMENT.
10. Sattarov, F., & Ashanova, G. (2025). TASVIRIY SAN'AT DARSLARIDA PEDAGOGIK RASM CHIZISHNING O 'ZIGA XOS XUSUSIYATLARI. *Universal xalqaro ilmiy jurnal*, 2(4.3), 145-149.
11. Sattarov, F. I. (2024). Practical and theoretical recommendations on drawing landscape compositions. *Science and Education*, 5(12), 238-241.
12. Sattarov, F. I. (2025). THE FORMATION OF COLORS IN NATURE AND THEIR CHARACTERISTICS OF CHANGE. *European Review of Contemporary Arts and Humanities*, 1(5), 70-73.
13. Sattarov, F. (2024). SCIENTIFIC-THEORETICAL FOUNDATIONS OF LEARNING THE RULES OF COMPOSITION AND DEPICTION IN PAINTING. *Multidisciplinary Journal of Science and Technology*, 4(10), 379-382.
14. Sattarov, F. I. (2026). TALABALARNING KOMPOZITSION TAFAKKURINI SHAKLLANTIRISH USULLARI (RANGTASVIR DARSLARI MISOLIDA). *Mahalliy va xalqaro konferensiyalar platformasi*, (1), 18-21.
15. Sattarov, F. I. (2024). Techniques and Methods of Creating Fine Art Works. *American Journal of Language, Literacy and Learning in STEM Education*, 2(3), 269-271.
16. Islomovich, S. F. QALAMTASVIR MASHG „ULOTLARIDA TALABALARNI KOMPOZISIYA OID BILIM VA MALAKALARINI RIVOJLANTIRISH.
17. Rakhimov, K. (2023). The place of graphics in the fine arts. *Solution of social problems in management and economy*, 2(2), 5-8.
18. Rakhimov, K. (2023). THE ROLE OF PORTRAIT ARTISTS IN FINE ARTS. *Models and methods in modern science*, 2(2), 13-19.
19. Rakhimov, H. U. (2023). ANALYZING THE PROFESSIONAL QUALITIES OF FUTURE FINE ARTS TEACHERS BASED ON ART STUDIES. *Экономика и социум*, (1-1 (104)), 50-53.
20. Rakhimov, H. U. (2026, January). THE SIGNIFICANCE OF AUTOPEDAGOGICAL COMPETENCE IN VISUAL ARTS EDUCATION. In *Claritas Conference Platform* (No. 1, pp. 30-34).

21. Umarjon o'g'li, H. R. (2021). Technologies for improving composition and drawing skills based on the rules of composition. *Galaxy International Interdisciplinary Research Journal*, 9(12), 765-767.

22. Pulatov, D. S., & Kh, R. U. (2019). On fine arts and its varieties. *Вестник магистратуры*, (4-4 (91)), 89-90.

23. Boltaboyev, A. (2023, December). BO 'LAJAK O 'QITUVCHINING KASBIY-PEDAGOGIK IJODKORLIGINI RIVOJLANTIRISH SHART-SHAROITLARI. In *INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE* on the topic: "Priority areas for ensuring the continuity of fine art education: problems and solutions" (Vol. 1, No. 01).

24. Boltaboev, A. K., & Abdirasilov, S. F. (2023). METHODOLOGICAL BASIS OF DEVELOPMENT OF PROFESSIONAL-PEDAGOGICAL COMPETENCE IN STUDENTS BY MAKING PENCIL DRAWINGS AND DRAFTS. *Экономика и социум*, (3-2 (106)), 57-60.

25. Xasanboy O'g'li, B. A. O'quv jaryonida qalamchizgi va qoralamalarni bajarishda talabalarni kasbiy-pedagogik kompetensiyasini rivojlatnirish texnologiyasi. *Scientific bulletin of namsu-научный вестник намгу-namdu ilmiy Axborotnomasi-2023-yil_7-son*.

26. Xasanboy o'g'li, B. A. TALABALARNI KASBIY-PEDAGOGIK QOBILYATLARINI RIVOJLANTIRISH METODIKASI. *Economy and Innovation* ISSN, 2545-0573.

27. ugli Boltaboev, A. K., & Khaydarova, M. K. (2026). DEVELOPMENT OF AESTHETIC THINKING OF SCHOOLCHILDREN THROUGH COMPUTER DESIGN. *European Review of Contemporary Arts and Humanities*, 2(1), 42-44.

28. Xasanboy o'g'li, B. A. UMUMTA'LIM MAKTABLARINING BOSHLANG 'ICH SINF O 'QUVCHILARINI TASVIRIY SAN'ATGA O 'RGATISHNING MAQSADI VA MAZMUNI.

29. Hasanboy o'g'li, B. A. Methods Of Using Modern Technologies Of Teaching In Primary Schools. *Galaxy International Interdisciplinary Research Journal*, 9(12), 960-963.

30. Boltabayevich, B. A. O. N. B. Baimetov. Technologies for Improving the Composition of Students in the System of Higher Pedagogical Education 2021/4. *The American Journal of Social Science and Education Innovations*, (03), 64-70.

31. O'G'Li, B. A. A. (2025). Rangtasvir mashg 'ulotlarini tashkil etishda kreativ va innovatsion yondashuvlarning didaktik ahamiyati. *Science and Education*, 6(12), 527-533.

32. O'G'Li, B. A. A., & G'Aybullayeva, T. O. Q. (2025). Portret san'atida kompozitsiya tushunchasi va uning badiiy ifodadagi ahamiyati. *Science and Education*, 6(12), 656-661.

33. O'G'Li, B. A. A., & Diyora, G. (2025). Natyurmort janri orqali madaniy merosni aks ettirish masalalari. *Science and Education*, 6(12), 650-655.
34. O'G'Li, B. A. A. (2025). Mustaqil ijodiy faoliyat tushunchasi va uning ta'lim jarayonidagi o'rni (rangtasvir fani misolida). *Science and Education*, 6(12), 640-644.
35. O'G'Li, B. A. A., & Yoqubova, M. B. Q. (2025). Rangtasvirda manzara ishlash jarayonida qisqa muddatli etyudlardan foydalanishning pedagogik samaradorligi. *Science and Education*, 6(12), 662-667.
36. Babur, N., Muazzam, N., & Shahrizoda, A. (2024). THE UNIQUENESS OF WORKING WITH GEOMETRIC OBJECTS IN PENCIL DRAWING CLASSES. *Western European Journal of Linguistics and Education*, 2(2), 62-66.
37. Бобур, А. Ў. Н. (2022). Тасвирий санъат асарларини яратишда композиция қонунларининг илмий асосларидан фойдаланиш. *Science and Education*, 3(2), 1087-1095.
38. Nurmamatova, M. S. Q. (2026). RANGTASVIR DARSLARIDA TALABALARNING MUSTAQIL IJODIY FAOLIYATINI RIVOJLANTIRISH USULLARI. *Mahalliy va xalqaro konferensiyalar platformasi*, (1), 7-10.
39. O'G'Li, B. A. A. (2025). Tasviriy san'at darslari orqali o'quvchilarning estetik madaniyatini rivojlantirishning ilmiy asoslari. *Science and Education*, 6(11), 918-923.
40. O'G'Li, B. A. A. (2024). Talabalarning figurali kompozitsiya ishlashda naturadan qarab ishlashning ahamiyati. *Science and Education*, 5(12), 229-232.
41. O'G'Li, B. A. A., Lutfullayeva, S. N. Q., & Olimjonova, O. J. Q. (2024). Rangtasvirda kompozitsiya ishlashning qonun-qoidalari, uslublarini o'rganishning nazariy va amaliy asoslari. *Science and Education*, 5(12), 214-218.
42. Nabiyev, B. (2022). Natyurmort kompozitsiyasini tuzish va tasvirlashda bosqichlar asosida ishlashning ahamiyati. *Academic research in educational sciences*, 3(12), 334-338.
43. Oripov, B. B. (2025, December). INCREASING THE SCIENTIFIC COMPONENT OF THE ART OF POTTERY IN STUDENTS. In *International Conference Platform* (No. 6, pp. 134-137).
44. Oripov, B. N. (2016). *Fine art and its teaching methods*. T.: Ilm-Ziya.
45. Oripov, B. N. (2013). *Tasviriy san'atni o'qitishning zamonaviy pedagogik texnologiyasi, didaktikasi va metodikasi*. Ilm-ziyo" nashriyoti.
46. Орипов, Б. Н. (2009). Тасвирий санъатни уқитишнинг замонавий педагогик технологияси, дидактикаси ва методикаси. Н., «НамДУ», 2010Й, 446.
47. Oripov, B. (2005). *Fine Arts and Methods of Its Teaching*. Tashkent:" Ilm-Ziya.

48. Odilboyeva, U. Z. (2025, December). The scientific and pedagogical influence of teacher cognition theory on method selection in the educational process. *International Conference Platform*, 6, 152–157.

49. Odilboyeva, U. Z. Q. (2026). O ‘ZBEK VA INGLIZ TILLARIDA TERMINLAR HOSIL BO ‘LISHINING QIYOSIY TAHLILI. *Mahalliy va xalqaro konferensiyalar platformasi*, (1), 32-36.

50. Odilboyeva, U. Z. (2026, January). THE DEVELOPMENT OF AUTOPEdagogical COMPETENCE IN STUDENTS DURING ENGLISH LANGUAGE EDUCATION. In *Claritas Conference Platform* (No. 1, pp. 90-93).

51. Rakhimov, H. U. (2021). Article title. *Asian Journal of Multidimensional Research*, 10(8), xx–xx.

52. Rakhimov, H. R. (2021). Technologies for improving composition and drawing skills based on the rules of composition. *Galaxy International Interdisciplinary Research Journal*, 9(12), 765–767.

53. Oktabrov, M. A. (2025, December). Ways to enhance students’ artistic and aesthetic taste in fine arts lessons. *Claritas Conference Platform*, 3, 8–12.

54. Oktabrov, M. A. (2025). The emotional expression of artists through colors and the psychological effect of colors in artworks. *European Review of Contemporary Arts and Humanities*, 1(4), 30–34.

55. Oktabrov, M. A. (2025). Innovatsion yondashuv asosida bolalarni dekorativ rasm chizishga o‘rgatishning didaktik ahamiyati. *IMRAS*, 8(6), 142–147.

56. Oktabrov, M. A. (2025). Natyurmort tuzish va uni tasvirlash usullari. *Intellectual Education Technological Solutions and Innovative Digital Tools*, 3(33), 75–80.

57. Oktyabrov, M. A. O. G. L. (2026). Rangtasvir darslarida talabalarning mustaqil ijodiy faoliyatini rivojlantirishda master-klass metodining tutgan o‘rni. *Science and Education*, 7(1), 999-1004.

58. Rakhimov, H. U. (2026, January). THE SIGNIFICANCE OF AUTOPEdagogical COMPETENCE IN VISUAL ARTS EDUCATION. In *Claritas Conference Platform* (No. 1, pp. 30-34).

59. Abdullayev, O. K. (2025). TALABALARNING KOMPOZITSIYA TUZISH VA TASVIRLASH KO ‘NIKMALARINI RIVOJLANTIRISH USULLARI. *Universal xalqaro ilmiy jurnal*, 2(4.3), 1-5.

60. Matkarimov, A. M. A. (2024). ANIQ FANLARDA MUSTAQIL TA’LIMNI TASHKIL ETISHDA CHIZMA GEOMETRIYA VA MUHANDISLIK GRAFIKASI FANINING O ‘RNI. *Universal xalqaro ilmiy jurnal*, 1(12), 375-377.

61. Mirziyoyev, S. (2018). TASVIRIY SAN’AT MASHG’ULOTLARINING ZAMONAVIY TA’LIMI Abdullayev O‘ktamjon Ergashevich NamDU TSMG kafedrası mudiri, dotsent. *НАМАНГАН ДАВЛАТ УНИВЕРСИТЕТИ*, 9.

62. Oktabrov, M. A. O. G. L. (2025). Natyurmort kompozitsiyasida yo 'l qo 'yiladigan xatolar va ularning oldini olish. *Science and Education*, 6(11), 955-960.

63. Mohirjon, O. (2023). Tasviriy sanat mashgulotlarining oziga xosligi. *O'zbekistonda fanlararo innovatsiyalar va ilmiy tadqiqotlar jurnali*, 2(15), 464-470.

64. Oktyabrov, M., & Ibrohimjonova, S. (2025). O'QUVCHILARGA RANGLARNI O'RGATISHDA FOYDALANISH UCHUN TAVSIYA ETILGAN METODLAR. *Universal xalqaro ilmiy jurnal*, 2(4.3), 150-156.

65. Sh, B. D. (2023). ISSUES OF DEVELOPMENT OF PROFESSIONAL COMPETENCE OF FUTURE VISUAL ARTS TEACHERS THROUGH GRAPHICS. *Экономика и социум*, (1-1 (104)), 8-11.