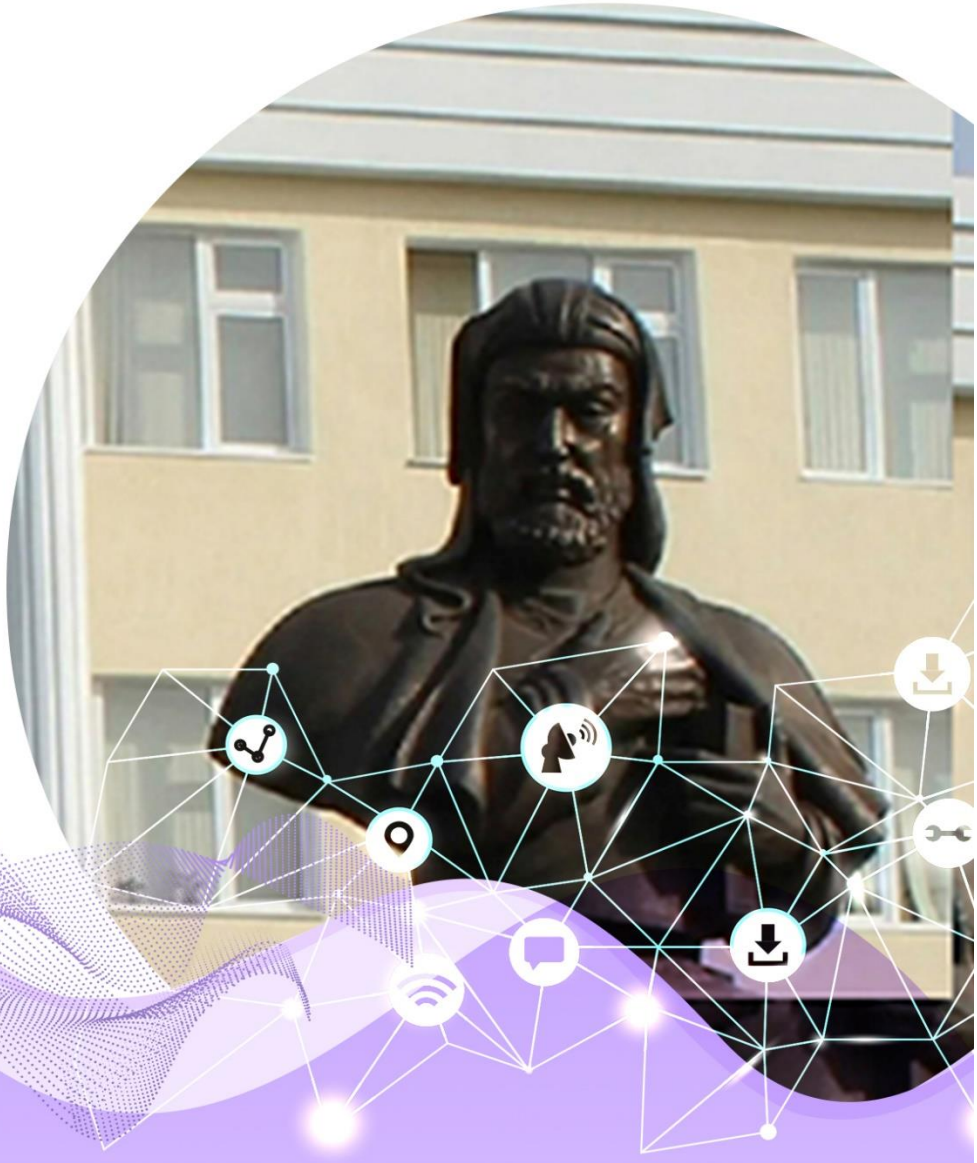

# «ZAMONAVIY INFORMATIKANING DOLZARB MUAMMOLARI: O‘TMISH TAJRIBASI, ISTIQBOLLARI»

mavzusida respublika miqyosidagi ilmiy-amaliy anjuman materiallari

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topishi va o‘zaro munosabatlarda pedagogik ta’sir samarasini aniqlashi qiyin kechadi.

Talabaga ilmiy-pedagogik yo‘nalish berish, uni tadqiqotchilikka yo‘naltirish hech qanday tayyorgarlik talab etilmaydigan, shunchaki oddiy hol deb panja orasidan qaraydigan o‘qituvchilar ish jarayonida yanglishib, xato va kamchiliklarga yo‘l qo‘yishi aniq.

Bugungi kunda ta’limga ijtimoiy-madaniy nuqtayi nazar bilan qarash, unga mos ta’lim maqsadi, mazmuni va metodlarini tanlashni talab etmoqda. Bu muammo ayniqsa, matematika, informatika va tabiiy fanlar ta’lim tizimida o‘ta dolzarbdir. Mavjud kasbiy tayyorgarlik tizimini isloh qilishda yangi ehtiyojlarni hisobga olish, ya’ni an’anaviy tizim doirasida zamonaviy pedagogik ta’limning umummadaniy konteksti va informatika o‘qituvchisini tayyorlashning ilmiy konteksti o‘rtasidagi qarama-qarshilikni inobatga olinishi maqsadga muvofiqdir.

Oliy ta’lim muassasasi jamoasi bir ilmiy olamga qiyoslanadigan bo‘lsa guruh ichidagi mikroguruhlar ilmiy olam ichidagi olam, u yerdagi har bir shaxs alohida bir olam (dunyo) hisoblanadi. Bu olamning “Men”i ilmiy-pedagogik, tadqiqotchilik jarayonida shakllanadi. Yangicha tafakkur va dunyoqarash vujudga keladi.

Demak, o‘qituvchi o‘zining kasbiy mas’uliyatidan kelib chiqib, ma’lum ilmiy-pedagogik, tadqiqotchilikka yo‘naltirilgan guruhlar doirasida faoliyat ko‘rsatadi. Bu, eng avvalo, o‘qituvchilar, o‘quvchilar jamoasi bo‘lib, bir tomondan ilmiy-tadqiqotchilikka yo‘naltirilgan muhitga tobora kirib borish o‘qituvchining kasbiy xususiyatidan kelib chiqsa, ikkinchi tomondan shaxsning ilmiy-pedagogik kadr sifatida shakllanish jarayonida uning jamiyatda o‘z o‘rnini belgilab olishi bilan amalga oshadi.

## SCIENTIFIC AND METHODOLOGICAL ASPECTS OF THE PREPARATION OF A MODERN COMPUTER SCIENCE TEACHER

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**Introduction.** Modern Informatics is a rapidly evolving field that requires competent and knowledgeable educators to prepare the next generation of professionals. The scientific and methodological aspects of preparing modern Informatics teachers are crucial for ensuring that they have the skills and knowledge needed to deliver effective instruction and facilitate learning. This article will explore the key aspects of preparing modern Informatics teachers, including understanding the subject matter, using effective teaching methods, staying up-to-

date with new developments, and addressing the ethical and legal considerations in the field.[1]

**Understanding the Subject Matter**

The first step in preparing modern Informatics teachers is ensuring that they have a deep understanding of the subject matter. This includes knowledge of the different technologies and tools used in the field, as well as the ability to analyze and utilize information effectively. To develop this understanding, teachers need to have a solid foundation in computer science, mathematics, and statistics.

In addition, modern Informatics teachers must be proficient in programming languages and familiar with software programs used in the field. They should also have an understanding of the different types of data and the methods used to collect, store, and analyze data. This includes knowledge of algorithms, data structures, and data visualization tools.

To develop this knowledge, modern Informatics teachers should pursue advanced degrees in computer science or related fields. They should also attend workshops and conferences and participate in continuing education programs to stay up-to-date with the latest developments in the field.

**Using Effective Teaching Methods**

The second aspect of preparing modern Informatics teachers is ensuring that they have the ability to teach in a way that is engaging, interactive, and effective. This requires an understanding of pedagogical techniques and methods that can help students to learn and retain information more effectively.

One effective approach is to use a project-based learning method that involves students in creating real-world projects. This approach encourages students to work collaboratively, use critical thinking skills, and apply what they have learned in a practical setting. Teachers can also use interactive teaching methods, such as gamification and simulation, to make learning more engaging and fun.[2]

In addition, modern Informatics teachers should be able to adapt to the needs and learning styles of individual students. This may involve using different teaching strategies, such as visual aids, group activities, or individual projects. They should also be able to provide constructive feedback and support to help students achieve their goals.

**Staying Up-to-Date with New Developments**

The third aspect of preparing modern Informatics teachers is staying up-to-date with the latest developments and trends in the field. This includes advances in technology and software, as well as changes in the way that information is analyzed and utilized. To stay up-to-date, modern Informatics teachers should attend conferences and workshops, read academic journals, and participate in online forums. They should also collaborate with other educators and professionals in the

field to share knowledge and best practices.[3]

Another effective approach is to use open-source software and tools. This not only saves money, but also provides access to the latest technologies and resources.

**Addressing Ethical and Legal Considerations**

The final aspect of preparing modern Informatics teachers is addressing the ethical and legal considerations in the field. This includes issues related to information security and privacy, as well as the ethical and legal considerations involved in the collection and use of data.

Modern Informatics teachers should be familiar with laws and regulations related to data collection, storage, and use, as well as ethical principles and guidelines. They should also be able to teach their students how to navigate these challenges effectively and responsibly.[4]

**Conclusion.** Preparing modern Informatics teachers requires a deep understanding of the subject matter, effective teaching methods, staying up-to-date with new developments, and addressing ethical and legal considerations. Educators in this field should have advanced degrees, participate in continuing education, use interactive teaching methods, stay up-to-date with the latest developments.

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## TA’LIM TIZIMIDA BULUTLI TEXNOLOGIYALARDAN FOYDALANISH SAMARADORLIGI

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Bugungi kunda internet texnologiyalarining rivojlanishi barcha sohalarga, shu jumladan ta’lim sohasiga o‘zining ijobiy ta’sirini ko‘rsatib kelmoqda. Bu texnologiyalar nafaqat axborotlarni uzatish va qabul qilish jarayonida, balki ta’lim

# ANJUMANGA KIRITILGAN MA’RUZALAR

## SO‘Z BOSHI – Nizomiy nomidagi TDPU rektori, t.f.d., professor A.K.Kirgizbayev

## 1-SHU’BA.
## INFORMATIKA ZAMONAVIY JAMIYATNING ASOSI SIFATIDA