

KOMPYUTR ORQALI FIZIKA FANINING BO‘LIMLARINI O‘RGANISH

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„Umumtexnika fanlar” kafedrası o‘qituvchisi

ANNOTATSIYA

Ushbu tadqiqotda ushbu bo‘shliqni to‘ldirishga hissa qo‘shish va o‘z ichiga olgan yangi o‘quv dasturini eksperimental qo‘llab-quvvatlash maqsadida o‘rta maktab darajasida zamonaviy fizika fanlari; Yangi ishlab chiqilgan kompyuter muhitida Interfaol ekran tajribasi kiritildi. Ushbu dasturlar mavhum mavzularni konkretlashtirish va zamonaviy fizikaga kirishda ularni yanada tushunarli qilish uchun katta hissa qo‘shadi deb hisoblash mumkin.

***Kalit so‘zlar:** Kompyuter yordamida ta’lim, Interfaol ekranli tajribalar, fizika ta’limi.*

Kirish: O‘rta maktabda qo‘llanilayotgan o‘qitish usullarini ko‘rib chiqsak, “o‘qituvchiga yo‘naltirilgan”, “qora doska” ta’limning hamon ustunlik qilayotganini ko‘ramiz. Bu usul odatda o‘qituvchi tomonidan boshqariladigan va boshqaradigan "bir tomonlama" o‘rganish uslubidir.[2] Biroq, ta’limning umumiy maqsadlaridan biri o‘quvchilarga "nimani va qanday o‘rganishni" o‘rgatishdir. Boshqacha qilib aytganda, bu "qanday o‘rganishni o‘rgatish". Chunki bizning davrimiz “bir umr o‘rganishni” talab qiladi. Ta’lim hayotimizdan keyin biznes muhitiga kirganimizda ham, bilimlarimizni yangilash va yangilarini qo‘shish tobora muhim ahamiyat kasb etadi.

Interfaol ekran tajribalari (IED): Interaktiv ekran tajribalari (IED) birinchi marta 1997 yilda Germaniyaning Berlin universitetida Kirshteyn va Rass tomonidan ishlab chiqilgan "Tirik fizika kitobi" loyihasi doirasida ko‘p sonli talabalar

ishtirokidagi xizmat kurslarida (Muhandislar uchun fizika) qo'llanilgan.[6] Ushbu tajribalarda interaktivlik (o'zaro ta'sir); Bunga foydalanuvchiga dastur tomonidan kompyuter ekranida bajariladigan tajribaga aralashish imkoniyatini berish orqali erishiladi. Videofilmlarda bo'lgani kabi, IED da ekranda paydo bo'ladigan tasvirlar "haqiqiy". Ya'ni, simulyatsiya dasturlaridagi kabi oldindan tayyorlangan va moslashtirilgan grafik va tasvirlar o'rniga; IEDlar raqamli kamera yordamida tajribaning har bir bosqichini suratga olish va ularni kompyuter muhitida birlashtirishdan iborat.

Xulosa : Ta'lim va ta'lim sohasida texnologik asbob va jihozlar sifatida tez-tez qo'llaniladigan kompyuter dasturlarining eng muhim xususiyatlari har qanday joyda ko'p vaqt talab qilmasdan osongina qo'llanilishi mumkin. Dasturlar CD yoki floppi disklarga yozilganligi sababli, ularni maktabda sinfda ham, uyda ham tinchroq muhitda bajarish va takrorlash mumkin. Shu tariqa o'quv muhitining maktabdan tashqarida tarqalishi yanada ortib bormoqda.

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