

**TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY
(TIMSS) - MATEMATIKA VA TABIIY FANLARDAN O'ZLASHTIRISH
DARAJASINI BAHOLASH DASTURI**

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Matematika va tabiiy fanlarni o'zlashtirish sifatini Xalqaro monitoring qilish va baholash tizimi TIMSS (TIMSS -Trends in International mathematics and science study) - 4- va 8- sinf o'quvchilarining matematika va tabiiy yo'nalishdagi fanlardan o'zlashtirish darajasini baholash dasturi bo'lib, tadqiqot ta'lim yutuqlarini baholash xalqaro assotsiatsiyasi (IEA) tomonidan tashkil etiladi.

TIMSS xalqaro baholash dasturida 4- va 8-sinf o'quvchilarining matematika va tabiiy fanlar bo'yicha egallagan bilim darajasi va sifatini solishtirish hamda milliy ta'lim tizimidagi farqlarni aniqlash bilan bir qatorda, qo'shimcha ravishda maktablarda matematika va tabiiy fanlar bo'yicha berilayotgan ta'lim mazmuni, o'quv jarayoni, ta'lim muassasasining imkoniyatlari, o'qituvchilar salohiyati, o'quvchilarning oilalari bilan bog'liq omillari o'rganiladi.

TIMSS dasturi o'zining birinchi tadqiqotini 1995-yilda boshlagan bo'lib, 2019-yilga qadar har to'rt yilda 1999, 2003, 2007, 2011, 2015 va 2019-yillarda tashkil etib kelinadi. Navbatdagi 8-davriylik 2023-yilda amalga oshirilishi rejalashtirilgan.

TIMSS xalqaro tadqiqotining asosiy maqsadi boshlang'ich va o'rta maktablarda matematika va tabiiy fanlar bo'yicha ta'lim sifatini qiyosiy baholashdan iborat. Tadqiqotda 4-8-sinf o'quvchilarining ta'limdagi yutuqlari, jumladan, ularning nafaqat bilim va ko'nikmalari, balki fanlarga bo'lgan munosabati, qiziqishlari va o'qishga bo'lgan motivatsiyasi ham baholanadi. Tadqiqot shunday tuzilganki, uning natijalari 4-sinf o'quvchilari 8-sinfga o'tganlarida, har 4 yilda ishtirokchi mamlakatlarda matematika va tabiiy fanlar bo'yicha ta'lim tendentsiyalarini kuzatib boradi. Shunday qilib, boshlang'ich va o'rta maktab o'quvchilarining ta'lim yutuqlari, shuningdek, boshlang'ich maktabdan o'rta maktabga o'tish davrida matematika va tabiatshunoslik ta'limidagi o'zgarishlar nazorat qilinadi.

TIMSS tadqiqot usullarini ishlab chiqish uchun asos sifatida "TIMSS Assessment Frameworks and Specifications" hujjati ishlatiladi. Ushbu hujjatda matematika va tabiiy fanlar bo'yicha ta'lim yutuqlarini baholashga, testlar va test topshiriqlarini ishlab chiqishga umumiy yondashuvlar belgilangan, matematika va tabiiy fanlardan tekshirilishi kerak bo'lgan tarkib, shuningdek, o'quvchilar topshiriqlarni bajarishda ko'rsatishi kerak bo'lgan kognitiv faoliyat turlari ham tavsiflaydi.

TIMSS xalqaro tadqiqot usullariga quyidagilar kiradi:

- ijobiy test natijalari;
- so' rovnomalar (o'quvchilar, o'qituvchilar, ta'lim muassasasi ma'muriyati, ta'lim sohasidagi mutaxassislar, tadqiqot sifatini kuzatuvchilar uchun);

- uslubiy ta'minot (tadqiqotni tashkil etish va o'tkazish bo'yicha milliy koordinatorlar uchun qo'llanma, maktab koordinatorlari uchun qo'llanma, test o'tkazish bo'yicha qo'llanma, topshiriqlarni bepul javoblar bilan tekshirish bo'yicha qo'llanma, ma'lumotlarni kiritish bo'yicha qo'llanma va boshqalar);

- dasturiy ta'minot (sinflar va o'quvchilarni tanlash, ma'lumotlarni kiritish uchun).

Xalqaro testlar quyidagi tamoyillar asosida ishlab chiqiladi:

- o'quv va kognitiv faoliyatning sinovdan o'tgan mazmuni va turlarini etarli darajada yoritish;

- xalqaro testlar mazmunining aksariyat ishtirokchi mamlakatlarda o'rganilayotgan materialga maksimal darajada muvofiqligi;

- testlarning o'zaro aloqasini ta'minlash;

- tekshirilayotgan mazmunning matematika va tabiatshunoslik ta'limini rivojlantirish nuqtai nazaridan ahamiyati;

- o'quvchilarning yosh xususiyatlariga muvofiqligi, test ishlab chiqilgan yutuqlarni baholash;

- ommaviy tadqiqotlar uchun talablarga muvofiqligi.

O'quvchilarning matematika va tabiiy fanlarga tayyorgarligini baholash uchun testlar (har bir variantda) ham matematika, ham tabiiy fanlar bo'yicha topshiriqlarni o'z ichiga oladi.

O'zbekiston Respublikasi Vazirlar Mahkamasining "Xalq ta'limi tizimida ta'lim sifatini baholash sohasidagi xalqaro tadqiqotlarni tashkil etish chora-tadbirlari to'g'risida"gi qarori asosida PIRLS, TIMSS, PISA va TALIS xalqaro tadqiqotlarini O'zbekistonda joriy etilishi belgilab qo'yilgan bo'lib, mazkur tadqiqotlarni joriy etish maqsadida Ta'lim sifatini nazorat qilish davlat inspeksiyasi huzurida Ta'lim sifatini baholash bo'yicha xalqaro tadqiqotlarni amalga oshirish milliy markazi tashkil etilgan.

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