OLIY TA'LIM
TARAQQIYOTI ISTIQBOLLARI

PERSPECTIVES OF HIGHER EDUCATION DEVELOPMENT

ПЕРСПЕКТИВЫ РАЗВИТИЯ ВЫСШЕГО ОБРАЗОВАНИЯ

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OLIY TA'LIM TARAQQIYOTI ISTIQBOLLARI

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Олий таълим тараккиётининг устувор йўналишлари

Хозирги кунда юртимизда давлат ва жамиятнинг барча соҳаларида туб ислоҳотлар давом этмоқдаки, бу ўзгаришлар негизи инсон, унинг ҳуқуқлари ва қонуний манфаатларини таъминлашга қаратилган.

Инсон капиталини ривожлантириш мамлакатнинг барқарор ривожланиш шарти эканлигига урғу берилмоқда. Бунда таълим, илм-фан ва аҳолининг интеллектуал салоҳиятини ошириш муҳим ўрин эгаллайди. Чунки, бугунги шиддатли раҳобат замонида фаҳат билимли, маърифатли миллат ва давлат муносиб тараҳҳиётга эриша олади.

Таълим соҳасининг асосий вазифаларидан бири бугунги кун учун зарур бўлган янги авлодни, илм-фан ўз ихтисослиги асосларини пухта эгаллаган, билимли ёшларни тарбиялашдир.

Ўзбекистон Республикаси Президентининг "Олий таълим тизимини янада ривожлантириш чора-тадбирлари тўғрисида"ги қарори асосида ижтимоий-иқтисодий ривожланишнинг устувор йўналишларига ҳамда ҳалҳаро стандартлар талабларига мос келадиган олий таълим тизимини яратиш бўйича ҳаракатлар бошланди.

Бинобарин, сўнгги беш йилда Олий таълим муассасалари сони **2 баробарга кўпайди**, яъни янги **92 та** ОТМлар ташкил этилиб, ҳозирги келиб, уларнинг сони **170** тадан ортди.

Республикамизда **29 та** хорижий олий таълим муассасаларининг филиаллари, **26 та** хорижий ва нодавлат ОТМлар ташкил этилди. Олий таълимда ракобат мухитини яратиш, олий таълим билан камровни кенгайтириш максадида **янги олий таълим муассасалари ва уларнинг филиаллари ташкил этилди**.

Олий таълим билан қамров даражаси **2016 йилдаги 9 фоиздан 2022 йилда 38 фоизга** етказилди. 2026 йилда олий таълим билан қамров даражасини **50 фоизга** етказиш мақсад қилинган.

Шунингдек, ОТМларда сиртки (махсус сиртки) ва кечки таълим кабул квоталари охирги уч йилда 3,5 баробарга ортди. Худудлардаги олий таълим муассасалари учун илмий-педагогик кадрлар захирасини яратиш максадида таянч олий таълим муассасаларида магистратурага максадли кабул квоталари жорий этилди. Олий таълим муассасаларининг илмий-педагогик захираси шакллантириш ишлари ривожлантирилди, магистратура кабул курсаткичлари 2,5 баробарга оширилди.

Олий маълумотли мутахассислар тайёрлаш сифат жиҳатдан янги босқичга кўтарилди. 10 дан ортик хорижий мамлакатларнинг (жумладан,

АҚШ, Буюк Британия, Япония, Россия, Туркия, Белорусь, Латвия, Хиндистон ва б.) **нуфузли олий таълим муассасалари** филиаллари **фаолиятини ташкил этиш** орқали олий таълим билан қамров даражасини ошириш ҳамда олий таълимда рақобат муҳитини яратиш ишлари амалга оширилди.

Ўзбекистон ва **60 дан ортик хорижий олий таълим муассасаларининг** ўзаро келишуви ҳамда **кўшма таълим дастурлари** асосида талабаларни ўкитишни ташкил этиш ва икки томонлама тан олинадиган диплом бериш амалиёти **жорий этилди.**

Ўзбекистон Республикаси олий таълим тизимини 2030 йилгача ривожлантириш концепцияси ва Вазирлар Маҳкамасининг "Олий таълим муассасаларида таълим жараёнини ташкил этиш билан боғлиқ тизимни такомиллаштириш чора-тадбирлари тўғрисида"ги қарорига биноан Олий таълим муассасалари ўқув жараёнини кредитмодуль тизимига ўтказилди.

Бундан ташқари, "Давлат олий таълим муассасаларининг академик ва ташкилий-бошқарув мустақиллигини таъминлаш бўйича қўшимча чора-тадбирлар тўғрисида" ги Президент Қарорига мувофик, 37 та олий таълим муассасаларига академик ва молиявий мустақиллик берилди. Тизимга халқаро стандартлар ва тамойиллар жорий этилмокда.

Юқоридагилар билан бирга олдимизда қуйидаги янада мухим вазифалар мавжуд:

Биринчидан, таълим сифатини ошириш. Бу йўналишда таълим стандартлари, ўкув дастурларини халқаро мезонларга мослаштириш, халқаро аккредитациядан ўтказиш, микдор ўзгаришларидан сифат ўзгаришларига ўтиш зарур.

Иккинчидан, илмий тадқиқотларни кучайтириш. Бу йўналишда ОТМ профессор-ўкитувчилари томонидан олиб борилаётган тадқиқотларни дунё даражасига олиб чиқиш. Нуфузли халқаро рейтинг ташкилотлари мезонлари асосида илмни, тадқиқот натижаларини тижоратлаштириш масалаларига эътиборни кучайтириш мақсадга мувофиқ.

Учинчидан, таълимни халқаролаштириш, академик мобилликни ривожлантириш зарур. Академик мобиллик дастурлари орқали талабалар сифатлироқ таълим олиш имкониятини яратиш, шунингдек мамлакатимизга замонавий билимлар кириб келишига кенг йўл очиш давр талабидир.

Тўртинчидан, давлат олий таълим муассасаларининг академик ва молиявий мустақиллигини янада ривожлантириш, уларнинг эркин фаолиятини учун шароитлар яратиш, ҳар жиҳатдан қўллаб-қувватлаш муҳим ахамиятга эга.

Юқоридаги муҳим йўналишлар доимий изланишни, чуқур таҳлил ва жиддий тадқиқотларни талаб этади. Ушбу вазифаларни бажаришда Олий ва ўрта махсус таълим вазирлиги ҳузуридаги Олий таълимни ривожлантириш тадқиқотлари ва илғор технологияларни татбиқ этиш маркази муҳим ўрин эгаллайди.

Ушбу Марказ томонидан ҳозирги кунда ўндан ортиқ устувор йўналишларда илмий тадқиқотлар амалга оширилмоқда. Хусусан, таълим сифатини ошириш, ўкув дастурларини замонавийлаштириш, дунёнинг нуфузли халқаро рейтинг ташкилотлари мезонлари асосида ОТМ фаолиятини ташкил этиш, ўкув адабиётларини экспертизадан ўтказиш, ахборот ресурс марказларини фаолиятини рақамлаштириш, "Study in Uzbekistan" махсус вебпорталини яратиш ва ҳ.к.

Юқоридаги тадқиқотларни муваффақиятли амалга оширишда Марказ Ўзбекистондаги Erasmus+ миллий офиси билан ҳамкорлик меморандуми имзоланди ва биргаликдаги амалий ишларни ўзида аниқ акс эттирган "Йўл харита"си тасдиқланди.

Erasmus+ Олий таълим бўйича экспертлар миллий гурухининг (National Team of Higher Education Reform Experts -HEREs) "Олий таълим тараққиёти истиқболлари" номли илмий-методологик журнали йиллар давомида мунтазам равишда чоп этиб келинмоқда. Мазкур нашрнинг 11-сонидаги асосий мавзулар, бу олий таълим муассасаларнинг автономлиги, олий таълимда ЕСТS кредит-модул тизимини жорий қилиш, олий таълим тизимида фаолият юритаётган кадрлар малакасини ошириш, қайта тайёрлаш ҳамда Егаsmus+ лойиҳаларининг тажрибалари, Европанинг илғор университетларига амалга оширилган ўқув ташрифлари, илмий тадқиқотлар натижалари ва таҳлилий материалларни қамраб олади.

Журналдаги мақолалар олий ўқув юртлари рахбарлари, ўқитувчи ва талабаларда катта қизиқиш уйғотиши, республикамизда олий таълимни ривожлантириш вазифаларини ҳаётга татбиқ этишига хизмат қилиши шубҳасиз.

Якубов Шухрат Умматалиевич Олий таълимни ривожлантириш тадкикотлари ва илғор технологияларни татбик этиш маркази директори, юридик фанлар доктори, профессор.

Priorities of higher education development

Currently, fundamental reforms are underway in all spheres of state and society in Uzbekistan. It is well-known that the development of human capital is a condition for the sustainable development of the country. Education, science and increasing the intellectual potential of the population play an important role.

One of the main tasks of the education sector is to train the new generation of young people who have thoroughly mastered the basics of science and their specialty. In line with the Resolution of the President of the Republic of Uzbekistan "On measures for the further development of the higher education system" numerous efforts have been already made to develop a higher education system considering priorities of socio-economic development and international standards.

For the last five years, the number of higher education institutions (HEIs) has doubled and reached **170 HEIs, including 92 new HEIs, 29 branches and 26 foreign and private HEIs**. Higher education coverage increased from 9 % in 2016 to 38% in 2022. In 2026 it should reach 50%. For the last three years the admission quotas for part-time (special part-time) and evening education at HEIs has increased by 3.5 times. In order to create a reserve of scientific and pedagogical personnel for HEIs in the regions, targeted admission quotas for master's degrees in basic HEIs increased by 2.5 times.

The quality of training of highly qualified specialists has risen to a new level also by creating a competitive environment in higher education through the activities of branches of prestigious HEIs of more than 10 foreign countries (including the USA, Great Britain, Japan, Russia, Turkey, Belarus, Latvia, India, etc.).

On the basis of the bilateral agreements with more than **60 foreign HEIs and joint educational programs**, the practice of joint student training and issuing double diplomas was introduced.

According to the Concept of HE development until 2030 and the Resolution of the Cabinet of Ministers "On measures to improve the system on organization of the educational process in HEIs" the educational process was switched to the credit-modular system.

In addition, in accordance with the Presidential Decree "On additional measures to ensure academic and organizational-management independence of state HEIs", academic and financial autonomy was granted to 37 HEIs.

The Center for Research and Higher Education Development, Application of Advanced Technologies under the Ministry of Higher and Secondary Specialised Education plays a key role in the implementation of significant tasks for HE development requiring continuous research and in-depth analysis.

The Center is currently conducting scientific research in more than ten priority areas: quality assurance, curricula modernisation, university governance considering criteria of the most prestigious international ranking, conducting expert reviews of educational literature, digitizing the activities of information resource centers, creating a special web portal "Study in Uzbekistan", etc.

The adopted "Road Map" and a Memorandum of cooperation between the Center and the National Erasmus+ Office in Uzbekistan will ensure success of consolidated efforts on the above tasks.

The scientific-methodological journal "Perspectives of Higher Education Development" of Erasmus+ National Team of Higher Education Reform Experts (HEREs) has been regularly published every year. The main topics of this 11th edition are the university autonomy, ECTS introduction, training and upgrading of HE personnel, best practice and the results of Erasmus+ projects, study visits to European partner universities, the results of respective scientific research and analytical materials.

Undoubtedly that the published articles will be of great interest to administrative and academic staff of HEIs and students and will contribute to overall higher education development in Uzbekistan.

Shukhrat Yakubov Director of the Center for Research and Higher Education Development, Application of Advanced Technologies, Doctor of Law, Professor

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І. СОВРЕМЕННЫЕ ТЕНДЕНЦИИ РАЗВИТИЯ ВЫСШЕГО ОБРАЗОВАНИЯ

YEVROPA VA OʻZBEKISTONDA YASHIL UNIVERSITET KONTSEPTSIYASI

Farmonov N.P

Annotatsiya: Hozirgi kunda ekologik muammolar yechimiga ta'lim tizimini joriy qilish bilan hissa qoʻshish, oʻsib kelayotgan yosh avlodning ekologik savodxonligini oshirish, ekologik ongi va ekologik madaniyatini shakllantirish va rivojlantirish, ekologik ta'lim va tarbiya jarayonini samarali tashkil etish butun insoniyat oldida turgan eng muhim vazifadir. Shundan kelib chiqib yetakchi oliy ta'lim muassasalari tabiatni asrash va atrof-muhit muhofazasiga hissa qoʻshish uchun Birlashgan Millatlar Tashkilotining 2030-yilgacha Barqaror rivojlanish maqsadlariga hamohang ekologik me'yorlar ishlab chiqilgan. Ushbu maqolada Yevropa Universitetlar Assotsiatsiyasi oʻtkazgan soʻrovnomaga asosan yashil universitet xususiyatlarining Yevropa tajribasini aniqlash va bu tajribalarni Oʻzbekiston universitetlariga tanishtirish maqsad qilingan. Shuningdek, milliy oliy ta'lim muassasalarining yashil universitet xalqaro reytinglaridagi ishtiroki tahlil qilingan.

Kalit soʻzlar: Yashil universitet, Erasmus+, barqaror rivojlanish maqsadlari, yashil kelishuv, ekologiyani asrash, atrof-muhit muhofazasi, yashil universitet xalqaro reytingi

GREEN UNIVERSITY CONCEPT IN EUROPE AND UZBEKISTAN

Farmonov N.

Abstract: Contribute to the solution of environmental problems through the introduction of the education system, increase the environmental literacy of the younger generation, the formation and development of environmental awareness and environmental culture, the effective organization of environmental education and training is the most important task ahead of all mankind. As a result, leading higher education institutions have developed green standards compatible with the United Nations 2030 Sustainable Development Goals to contribute to nature conservation and environmental protection. This article aims to identify the European experience of green university features based on a survey conducted by the European University Association and to introduce these experiences to Uzbek universities. The participation of national higher education institutions in the international rankings of green universities was also analyzed.

Keywords: Green University, Erasmus+, The Sustainable Development Goals, The Green Deal, Environmental Protection, Green University International Rating

Kirish

Oliy ta'lim muassasalari (OTM) har bir jamiyatda rivojlanish yoʻllarini belgilab berishi, jamiyatdagi mavjud muammolarni o'rganishi bilan birga, aniqlangan muammolarga nazariy yechim taklif etuvchi va taklif etilgan nazariyalarni birinchilardan boʻlib hayotga tatbiq etuvchi lokomotiv boʻlishi lozim. Hozirgi kunda nafaqat Oʻzbekistonda, balki butun dunyoda tabiatni asrash, atmosferaga zararli gazlar chiqarilishini cheklash, atrof-muhitga chiqindilar chiqarilishini kamaytirish, chiqindini saralash, qayta ishlash yoki bezarar tarzda yoʻq qilish eng dolzarb global muammoga aylandi.

Tabiatga inson omili ta'sirida yetkazilayotgan zarar koʻlamini tasavvur qilish uchun 2021-yil 4-noyabr kuni Oʻzbekiston poytaxti Toshkent shahrida kuzatilgan chang-gʻubor natijasida ob-havo ifloslanishi koʻrsatgichiga e'tibor berish kifoya qiladi. Oʻsha kuni soat 21:00 atrofida Toshkent shahri havo ifloslanish darajasi boʻyicha onlayn reytingda birinchi oʻringa chiqdi, chang miqdori ruxsat etilgan koʻrsatgichdan 30 barobargacha yuqori ekanligi qayd etilgan [1]. Bu misli koʻrilmagan holat yogʻingarchilik kuzatilmagani sababli 3 kungacha saqlanib qoldi. Bunday tabiiy talofatning oldini olish, tabiat insoniyatdan oʻch olmasidan oldin, ekologiyani asrash uchun tevarak-atrofga oʻsimliklar va boʻta-daraxtlar ekish orqali yashil makon yaratish, tabiatni asrashda yanada faol boʻlish, insonlarni yashillashtirish tamoyiliga, ya'ni, ularni tabiat muammolariga koʻproq jalb qilish, xabardorliklarini oshirish, ekologik muammolarni muhokama qilish zarur.

Tabiatni asrashda jamiyat lokomotivi boʻlgan OTMlari yetakchilik qilishi, ta'lim muassasalari "Yashil universitet" konsepsiyasiga amal qilishi ularning ta'lim berish, ilm-fan bilan shug'ullanish kabi muhim vazifalaridan biridir. Ushbu maqolada oliy ta'limda Yashil universitet tushunchasining Yevropa tajribasi nimadan iborat ekanligi, Oʻzbekiston oliy ta'lim muassasalarida yashil universitet tushunchasi holati va ularga dunyo tajribasini tanishtirish masalalari oʻrganiladi. Shuningdek, tabiatni asrash sohasidagi yetakchi Oʻzbekiston OTMlarini oʻrganish, ularning tajribasini boshqa OTMlarga tanishtirish, erishgan yutuqlari bilan bo'lishish, yashil universitet bo'yicha jahon reytinglarini o'rganish [2], universitetlar egallagan oʻrinlarini tahlil qilish, reytingda qatnashish uchun metodologiyasini o'rganish maqsad qilingan. O'rganish natijasida O'zbekiston OTMlarini reytingda ishtirok etishga jalb qilish, intilishlarini qoʻllab-quvvatlash va maslahat berish kabi vazifalar bajariladi. Yashil universitetlar haqida izlanish olib borgan oʻzbek olimlarining ishlari yetarli emasligi sababli ushbu tadqiqot muhim ahamiyatga egadir. Bu tadqiqotda yashil universitet konsepsiyasining [3] ayni holati, oʻziga xosliklari va muammolariga murojaat qilinadi. Metodologiya boʻlimida tadqiqot nazariyasi, uni olib borish usullari, foydalanilgan metodlar oʻrganiladi. Asosiy qismda Yevropa Universitetlari Assotsiatsiyasi oʻtkazgan soʻrovnoma savollari, natijalar tahlili, ularni Oʻzbekiston OTMlarida joriy etish imkoniyatlari oʻrganiladi.

Metodologiya

Maqolada Yevropa OTMlarining yashil universitet xususiyatlari sintezlash va umumlashtirish orqali oʻrganiladi. Oʻzbekiston OTMlarini oʻrganishda esa modellashtirish, ya'ni, xalqaro OTMlarning maqsadni belgilash, ularni monitoring qilish, natijalarni tahlil qilish orqali erishgan yutuqlari model qilib olinib, Oʻzbekiston OTMlari ularga qiyoslanadi.

Yevropa Universitetlari Assotsiatsiyasi o'tkazgan so'rovnoma

Tabiiy ofatlar qarshisida ilojsiz qolgan insoniyat tabiatsiz yashay olmasligini, mavjud boʻla olmasligini anglab yetdi. 2019-yil dekabridan boshlanib, hozirgi kungacha gibridlashib, yangidan yangi shtammlari tarqalayotgan Covid-19 pandemiyasi insoniyatning naqadar ojiz ekanligini koʻrsatdi. Pandemiya davrida hukumatlar e'lon qilgan oʻz-oʻzini izolyatsiya qilish, pandemiya tarqalishini oldini olish uchun insonlarning uyda qolishi tufayli insoniyat sivilizatsiyasi, sanoatlashish natijasida qisqarib ketgan tabiat oʻzini ancha erkin his qildi, bemalol nafas oldi. Pandemiyadan oldin gavjum boʻlgan metropolislarda, *shahar markazlarida yovvoyi hayvonlar* [4] toʻsiqsiz erkin harakat qildilar.

Tabiatni asrashda universitetlar hissasini aniqlash maqsadida 2021-yil 15 martdan 9 aprelgacha Yevropa Universitetlari Assosatsiyasi Yevropa qit'asida va boshqa hamkor davlatlarda joylashgan OTMlarda soʻrovnoma oʻtkazdi. Yevropa Universitetlari Assotsatsiyasi Yevropa qit'asida joylashgan 48ta davlatning 800dan ortiq universitetlari va milliy rektorlar konferensiyalarini oʻzida birlashtiradi. U Yevropa Ittifoqining ta'lim, madaniyat, ilmiy izlanish va innovatsiyalar borasida, shuningdek, Bolonya Jarayonida muhim oʻrin tutadi. Assotsatsiya ilm-fan, ta'lim sohasidagi doimiy izlanishlari orqali oʻzining mustaqil soʻziga ega boʻlib, nafaqat Yevropada, balki butun dunyoda ijtimoiy rivojlanish yoʻllarini belgilab berayapti.

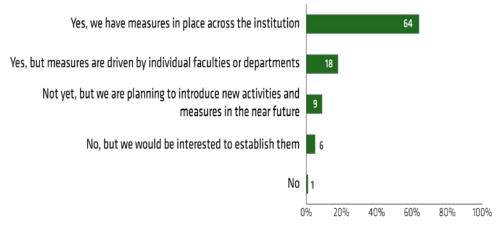
Jahonda ta'lim muassasalarining integrallashuvida Erasmus+ dasturi katta ahamiyatga ega bo'lib, Yevropa va dunyo universitetlarning o'zaro hamkorlik qilishi, tajriba almashishlariga keng yo'l ochib beradi. Yevropa Ittifoqi tomonidan moliyalashtiriladigan Erasmus+ dasturi ko'plab davlatlarda Erasmus+ milliy ofislarini ochgan. O'zbekiston Erasmus+ milliy ofisi ham OTMlar uchun har yili xalqaro ekspertlar ishtirokida seminar-treninglar tashkil qilib keladi. 2021-yilda ham bir necha treninglar o'tkazildi, shuningdek, ofis milliy ekspertlarga xalqaro treninglarda qatnashishga yordam berib kelayapti. Shunday xalqaro treninglardan biri oktabr oyida "Yashil universitet" mavzusida tashkil qilindi.

Yevropa oliy ta'lim muassasalarida yashil universitet tushunchasi

Ma'lumki, Birlashgan Millatlar Tashkilotining 2030-yilgacha Barqaror Rivojlanish Magsadlari (Sustainable Development Goals, SDGs) va Yashil Kelishuv (European Green Deal) loyihalari orqali barcha uchun erkin, farovon, barqaror kelajakni ta'minlash maqsadida kambag'allik, ochlik, tengsizlik, kasallik kabi illatlarga qarshi kurashuvchi 17ta maqsadni belgilab olgan. Yevropa Universitetlari Assosatsiyasi Yevropa Ittifoqi hududidagi va hamkor davlatlardagi OTMlarda yashil universitet tushunchasini anglash, ekologiyani asrash maqsadida tashkil qilingan loyihalari va OTMlar erishgan yutuqlarini boshqa OTMlar orasida keng yoyish uchun so'rovnoma o'tkazdi. So'rovnomada ishlatilgan Yashil universitet atamasi [5] yashil, ekologik toza va tabiiy resurslardan samarali foydalanuvchi universitet tushunchasini anglash va unga erishishning aniq maqsadlarni belgilash ma'nosida ishlatilgan. So'rovnomada ishtirok etgan OTMlarni tahlil qiladigan bo'lsak, Yevropa qit'asida joylashgan 372ta OTM ishtirok etganligi, ulardan 305tasida ekologik me'yorlar mavjudligi ma'lum bo'ldi. Ishtirokchi OTMlari soni bo'yicha Fransiya, Ispaniya, Avstriya, Qozog'iston va Ruminiya kabi davlatlar peshqadamlik qilgan.

"Ta'lim muassasangizda ekologik me'yorlar mavjudmi?" degan savolga javob bergan (natijalar quyidagi diagrammada keltirilgan) OTMlarning 64 foizi universitet darajasida, 18 foizi ma'lum bir fakultet, kafedra yoki bo'limlar darajasida ekologik me'yorlar borligini, 14 foizi esa yaqin kelajakda me'yorlarni ishlab chiqmoqchi ekanliklarini bildirishgan.

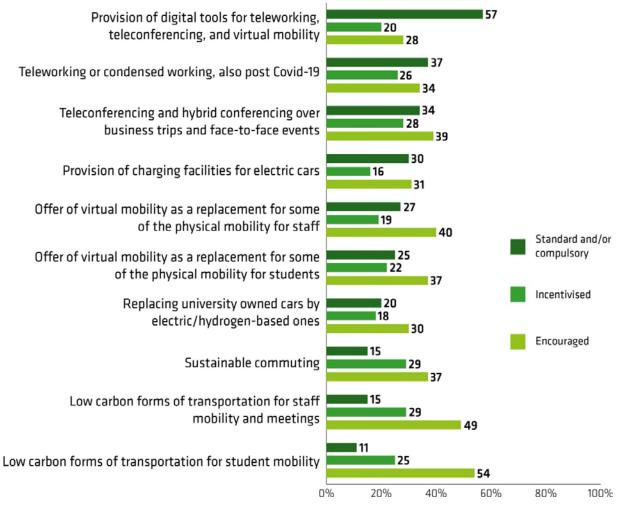
Q5: Does your institution have any greening measures in place? Please select one option.



Soʻrovnomada fikr bildirish soʻralgan savollar mazmuniga e'tibor beradigan boʻlsak, Greening mobility — ishchi-xodimlar va talabalarning OTMlarga kunlik qatnashlari, kasbiy va ilmiy faoliyatlari bilan shugʻullanishlari majburiylik, ixtiyoriylik va/yoki ragʻbatlantiruvchilik nuqtai nazardan tahlil qilingan. Masalan, masofadan turib ishlash, onlayn konferensiyalar uchun raqamli texnologiyalar bilan

ta'minlash, o'zgaruvchan va/yoki zich ish grafigida ishlash ko'plab universitetlarda nisbatan majburiy etib belgilangan. Xizmat safari, yuzma yuz uchrashuv o'rniga gibrid konferensiya yoki uchrashuv tashkil etishda, elektr transportlar uchun zaryadlash imkoniyatini yaratishda majburiylik va rag'batlantirish ko'rsatgichi deyarli tengligini ko'rishimiz mumkin (diarammada keltirilgan). Talaba va o'qituvchilarga virtual harakatlanish taklif etish yoki tabiatga nisbatan kam uglerod chiqaruvchi avtobus, tramvay, poyezd kabi jamoat transportlaridan foydalanishni OTMlar rag'batlantiradilar.

Q6: Which of the following activities and measures take place at your institutin? Please select all that apply in the following categories.



Oʻqish va ta'lim berishda yashil universitet tamoyilini ishtirokchi OTMlarning 80 foizi muhim, dolzarb deb hisoblaydi. Ularning 94 foizi darsdan tashqari mashgʻulotlarda, 79 foizi bakalavr bosqichida, 82 foizi magistratura bosqichida, 84 foizi esa tanlov fani sifatida yashil makon tushunchasiga alohida e'tibor berishganliklarini bildirishgan.

Ishtirokchi OTMlarning 70 foizida ilmiy ishlar va innovatsiyalarda ekologik me'yorlar borligini koʻrishimiz mumkin. Laboratoriya tajribalarida zararli mahsulotlarni kam zararli yoki zararsiz mahsulotlarga almashtirish, laboratoriya jihozlari, mahsulotlari, tajriba natijalarini boshqa OTMlar bilan boʻlishish orqali laboratoriya sinovlarining tabiatga xatarli ta'sirini kamaytirish maqsad qilingan. Shuningdek, yashil universitet sohasida tajribalar va innovatsion mashgʻulotlar uchun alohida grantlar ajratilgan, olimlar va tashabbuskorlarni ragʻbatlantirish yoʻlga qoʻyilgan. OTMlarning 93 foizi chiqindilarni yigʻish, saralash, qayta ishlash yoki zararsiz yoʻq qilish tizimiga ega. Yana ta'kidlash oʻrinliki, koʻplab *OTMlarida binolar qurish va ta'mirlashda atrof-muhitni asrash* [6], tabiiy resurslardan foydalanishni minimallashtirish, bino va hududni koʻkalamzorlashtirish uchun gul, boʻta, daraxt kabi oʻsimliklar ekish ishlari amalga oshiriladi.

Yuqorida alohida tahlil qilingan savollardan tashqari ta'lim muassasalari doirasida va boshqa jamoat tashkilotlari bilan birgalikda ekologiyani asrash, koʻchat ekish, koʻkalamzorlashtirish va obodonlashtirish boʻyicha hamkorlik qilish, milliy va xalqaro yashil universitet reytinglarida qatnashish, OTMlarning Yevropa Ittifoqining 2030-yilgacha Barqaror Rivojlanish Maqsadlari va Yashil Hamkorlik loyihalariga hamohang strategiyalarga ega boʻlishlari, aniq maqsad va koʻrsatgichlarga erishishlarini monitoring qilib borish, yillik hisobotlar yuritish, ehtimoliy qiyinchiliklar va toʻsiqlarni aniqlash, ularga yechim taklif etish vazifalari koʻrib chiqilgan (soʻrovnoma natijasi bilan toʻliq tanishish uchun [7] manbaga murojaat etish mumkin). Belgilangan maqsad va vazifalarga erishishda OTM rahbariyati moddiy va ma'naviy qoʻllab-quvvatlashi, oʻqituvchilar tashabbusi [8], shaxsiy oʻrnak boʻlishlari va talabalarning hissasi alohida qayd etib oʻtilgan.

Xulosa qilib aytganda, Yevropa Universitetlari Assotsatsiyasi tabiatni asrash va atrof-muhit muhofazasida, Yevropa Ittifoqining oliy ta'lim, ilmiy izlanish va innovatsiya siyosatini oʻzida aks ettiradi. Yevropa va xalqaro tashkilotlar bilan hamkorlik qilish orqali OTMlarning rivojlanishiga ijobiy ta'sir koʻrsatadi. Assotsatsiya universitetlararo tabiatni asrash tajribalarini almashish uchun forum va konferensiyalar tashkil qiladi.

Oʻzbekiston OTMlarining reytinglarda ishtiroki tahlili

Oʻzbekistonda ham "Yashil Makon" umummilliy loyihasi doirasida vazifalar belgilangan va ijrosi ustidan samarali nazorat olib borish yoʻlga qoʻyilgan. Orol dengizi tubidagi suvi qurigan hududlarda "yashil qoplamalar" - himoya oʻrmonzorlari barpo etish, ekologik muhitni barqarorlashtirish hamda tabiiy muvozanatni tiklash maqsadida tizimli ishlar olib borilmoqda. Natijada ushbu hududda 1126 ming gektar maydon ekishga tayyorlanib, 461 ming gektarda oʻrmon barpo qilish ishlari amalga oshirildi, jumladan, 93 km masofada himoya toʻsiqlari tashkil etilib, kelgusi ekish mavsumlarida ushbu hududda ekish ishlarini davom ettirish uchun 420 gektar maydonda saksovul niholxonalari tashkil etildi. Orol dengizining suvi qurigan tubidan koʻtarilayotgan qum, tuz va chang

zarrachalarining salbiy ta'sirini kamaytirish, ushbu hududlarda choʻl oʻsimliklaridan "yashil qoplamalar" - himoya oʻrmonzorlari barpo etish ishlarini izchillik bilan davom ettirish hamda global iqlim oʻzgarishlari va Orol dengizi qurishining qishloq xoʻjaligi rivojlanishi hamda aholining hayoti va faoliyatiga salbiy ta'sirini yanada yumshatish choralari ishlab chiqilgan [9].

Respublika hududlarida oʻrmonzorlar, shuningdek, Orol dengizi Orolbo'yi hududlarida "yashil qoplamalar" barpo etish bo'yicha qo'shimcha choratadbirlar toʻgʻrisida, Shoʻrtan gaz-kimyo kompleksi, Buxoro Neftni qayta ishlash zavodi atrofida yashil voha barpo etish toʻgʻrisida, Istirohat bogʻlari va yashil zonalarni tashkil etish metodologiyasi toʻgʻrisidagi nizomni tasdiqlash haqida Vazirlar Mahkamasi Qarorlari qabul qilingan. Atrof-muhitni muhofaza qilish hamda ekologik nazorat sohasidagi davlat organlari faoliyatini tashkil etish choratadbirlari toʻgʻrisidagi Oʻzbekiston Respublikasi Prezidentining Qarorida ekologiya va atrof-muhitni muhofaza qilish yoʻnalishini "Korrupsiyasiz soha"ga aylantirish, ekologik tarbiya, targʻibot va ta'lim tizimini tashkil etish, ilmiy-tadqiqot institutlari, oliy ta'lim muassasalari faoliyatiga ko'maklashish, yoshlarda ekologik bilim va koʻnikmalarni ragʻbatlantirish maqsadida umumiy oʻrta ta'lim maktablarida faol ekolog o'quvchilarni mahalliy budjet mablag'lari hisobidan bir martalik pul mukofotlari bilan ragʻbatlantirish mexanizmlarini joriy etish, oliy ta'limda ekologiya va atrof-muhitni muhofaza qilish bo'yicha yangi (eko-tahlilchi, ekoauditor, ekolog-logist va boshqa) kasblarni joriy etish bo'yicha takliflar tayyorlash vazifalari belgilangan.

Oʻzbekistonning yetakchi OTMlari barqaror rivojlanish boʻyicha xalqaro reytinglarda ishtirok etib kelyapti. "UI GreenMetric World University Rankings" barqaror rivojlanish boʻyicha *universitetlar reytinggini yurituvchi tashkilotlardan biridir* [10]. Bu reytingga Indoneziya universiteti tomonidan 2010-yilda asos solingan. Ushbu reytingning maqsadi butun dunyo universitetlarida Yashil kampus va Barqarorlik bilan bogʻliq mavjud holat va siyosat boʻyicha onlayn soʻrov natijalarini taqdim etishdir.

Universitet rahbarlari va manfaatdor tomonlarning e'tiborini global iqlim o'zgarishiga qarshi kurashish, energiya va suvni tejash, chiqindilarni qayta ishlash va yashil transportga ko'proq e'tibor qaratish maqsad qilingan. Reytingda OTMlar faoliyatini baholash 6 mezonga asoslangan, ya'ni Binolar joylashuvi va infratuzilma (SI), Energiya va iqlim o'zgarishi (EC), Chiqindilarni boshqarish (WS), Suvni tejash (WR), Transport (TR) va Ta'lim va tadqiqot (ED). 2021-yilgi reytingda dunyoning 80 davlatida joylashgan 956 universitetidan 2.553.576 professor-o'qituvchilar qatnashdilar. Gollandiyaning Wageningen universiteti va tadqiqot markazi 2017-yildan beri birinchi o'rinni hech bir universitetga bermay kelayapti.

Oʻzbekiston OTMlari 2019-yildan boshlab "UI GreenMetric World University Rankings" reytinggida qatnashib kelayapti, oʻsha yilda birgina Mirzo

Ulugʻbek nomidagi Oʻzbekiston Milliy universiteti qatnashib, 374-oʻrinni egallagan boʻlsa, 2020-yilgi reytingda Oʻzbekiston Milliy universiteti 353-oʻrin, Toshkent irrigatsiya va qishloq xoʻjaligini mexanizatsiyalash muhandislari instituti ilk bor qatnashib, 912ta universitet ichida 621-oʻrinni egallagan. 2021-yilgi reyting natijalari odatdagidek dekabr oyida e'lon qilindi, bu yilda Oʻzbekistondan oldingi yillarga qaraganda biroz koʻproq, 8ta OTM qantashdi, Mirzo Ulugʻbek nomidagi Oʻzbekiston Milliy universiteti 421-oʻrin, Toshkent davlat yuridik universiteti 496-oʻrin, Toshkent davlat agrar universiteti 587-oʻrin, Toshkent irrigatsiya va qishloq xoʻjaligini mexanizatsiyalash muhandislari instituti 772-oʻrin, Abu Ali ibn Sino nomidagi Buxoro davlat tibbiyot instituti 790-oʻrin, Andijon mashinasozlik instituti 792-oʻrin, Denov tadbirkorlik va pedagogika instituti 844-oʻrin, Akfa universiteti 879-oʻrinni egalladilar. Reyting natialari 1-Jadvalda keltirilgan.

Oʻzbekiston OTMlarining reytingda qatnashishlarini baholaydigan boʻlsak, qoniqarli darajada emas. Chunki 2019-yilda *Oʻzbekistonda 102ta* [11], 2020-yilda 129ta [12] ta'lim muassasalari bor edi. 2021-oʻquv yilida esa davlat oliy ta'lim muassasalari — 96ta, nodavlat oliy ta'lim muassasalari — 9ta, xorijiy oliy ta'lim muassasalari va ularning filiallari — 25ta, jami soni 130taga yetgan. Soʻnggi yilni foizlarda ifodalasak, 130tadan 8ta, ya'ni, 6.15% OTM reytingda qatnashganligi juda past koʻrsatgich.

Yevropa va Oʻzbekiston yetakchi ta'lim muassasalari tajribasidan kelib chiqib, universitet darajasida barqarorlik ta'limini yaratish boʻyicha quyidagi tavsiyalarni taklif qilamiz:

- Darsdan tashqari tadbirlarni tashkil qilishda, bakalavriat, magistratura oʻquv dasturlarida, tanlov modullarida va oʻquv dasturlarida ekologik muhitni barqarorlashtirish hamda tabiiy muvozanatni tiklashni hisobga olgan holda isloh qilish;
- Kelajakda muassasa, alohida boʻlimlar yoki fakultetlarda koʻkalamzorlashtirish tadbirlarini tashkil etish;
- OTMlarini onlayn konferentsiya, uchrashuvlar va darslar tashkil etish, virtual mobillik uchun raqamli vositalar bilan ta'minlash.

1-Jadval Mamlakatlar boʻyicha reyting 2021- Oʻzbekiston

Reyting	Universitet	Umumiy ball	Joylashuv va infratuzilma	Energiya va iqlim oʻzgarishi	Chiqindini qayta ishlash	Suv	Transport	Ta'lim
1	Mirzo Ulug'bek nomidagi							
	Oʻzbekiston Milliy universiteti	5900	750	875	1200	550	1500	1025
2	Toshkent davlat yuridik	5450	1100	725	1050	600	1050	925
	universiteti							

3	Toshkent davlat agrar	5025	900	1125	300	650	1325	725
	universiteti							
4	Toshkent davlat irrigatsiya va							
	qishloq xoʻjaligini							
	mexanizatsiyalash muhandislari	3900	375	700	450	400	1125	850
	instituti							
5	Abu Ali ibn Sino nomidagi							
	Buxoro davlat tibbiyot instituti	3800	825	600	150	550	450	1225
6	Andijon mashinasozlik instituti	3800	500	500	375	350	850	1225
7	Denov tadbirkorlik va	3300	625	825	225	400	550	675
	pedagogika instituti							
8	Akfa universiteti	2975	650	700	75	300	675	575

- Atrof-muhitga yoʻnaltirilgan barqaror turizmdan foydalanishni targ'ib qilish;
- Laboratoriya tadqiqotlarining atrof-muhitga ta'sirini kamaytirish yoki umumiy tadqiqot infratuzilmalaridan boʻlishib foydalanishni rag'batlantirish ustida ishlash;
- Chiqindilarni boshqarish va qayta ishlash, barqaror qurilish va ta'mirlash, kampusni ko'kalamzorlashtirish;
- Hamkor institutlar va talabalar guruhlari va tashkilotlari bilan hamkorlik qilish va xalqaro miqyosda chiqishlar qilish;
- Yashillashtirish boʻyicha taraqqiyotni kuzatish uchun aniq maqsadlar, maqsad va koʻrsatkichlarni oʻz ichiga olgan strategiyalarni ishlab chiqish.

Xulosa

Xulosa qilib aytadigan boʻlsak, Oʻzbekiston OTMlarining tabiat va atrof-muhitni asrash va uning barqarorligini ta'minlash borasidagi eng muhim vazifalari quyidagilardan iborat: aholi farovonligi uchun qulay tabiiy shart-sharoitlar yaratish, ekologiyani yaxshilash samaradorligi va barqarorligini ta'minlash maqsadida tabiiy resurslardan tejab foydalanish,qayta tiklanadigan energiyadan foydalanishni ommalashtirish,chiqindilardan oqilona foydalanish, hududiy va mahalliy darajada yoʻqolib borayotgan turlarni saqlab qolish. Atmosfera havosini muhofaza qilishda shahar va aholi yashaydigan punktlarda atmosfera havosiga chiqariladigan zararli gazlarni kamaytirish uchun aholining yashil transport va jamoat transportlaridan foydalanishlarini ommalashtirish, kishilarning sanitar-gigienik qoidalarga rioya qilishi, buning uchun respublikamizning barcha hududlarida chiqindilarni kamaytirish, kam chiqindili texnologiyalardan foydalanish, eskirgan qurilmalarni tabiiy resurslar sarfini kamaytiruvchi zamonaviy qurilmalar bilan almashtirish OTMlar tomonidan ijtimoiy hayotda keng targʻib qilinishi zarur.

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БУЮК БРИТАНИЯ ВА ЎЗБЕКИСТОНДА ПЕДАГОГИК ТАЪЛИМ ТАРАҚКИЁТИНИНГ КИЁСИЙ ТАХЛИЛИ

Нурманов А.Т., Жабборов У.А.

Аннотация: Педагогик таълим тизимида максад, структура, мазмун ва ташкилий компонентлар Буюк Британия ва Ўзбекистонда ўкитувчилар тайёрлаш тизимини киёсий ўрганиш учун асос бўлиб хизмат килади. Буюк Британия ва Ўзбекистон педагогик таълим тизимини киёсий ўрганиш

жараёнида Европада, жумладан, Буюк Британияда ўқитувчилар тайёрлаш тизимига оид аутентик манбалар, Европа Кенгаши хужжатлари, халқаро тадқиқотлар материаллари, Болонья жараёнига оид хужжатлар, Англиянинг миллий маърузалари ҳамда Ўзбекистон Республикаси Президенти қарор ва фармонлари, Вазирлар Маҳкамасининг қарорлари ва бошқа меъёрий-ҳуқуқий ҳужжатлари асос бўлиб хизмат қилди.

Калит сўзлар: узлуксиз педагогик таълим, тарақкиёт тенденциялари, таълимнинг демократлашуви, вариативлик, таълимнинг ахборотлашуви, таълим сифати, академик стандарт, касбий стандарт, таълим маршрутлари, модель, концептуал модель.

COMPARATIVE ANALYSIS OF THE DEVELOPMENT OF PEDAGOGICAL EDUCATION IN THE UNITED KINGDOM AND UZBEKISTAN

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Abstract: The purpose, structure, content and organizational components of the system of pedagogical education serve as a basis for a comparative study of the system of teacher training in England and Uzbekistan. In the process of comparative study of the British and Uzbek pedagogical education systems in Europe, including the UK, authentic sources on teacher training, Council of Europe documents, international research materials, documents on the Bologna Process, national reports and decrees of the President of the Republic of Uzbekistan, Cabinet decisions and other normative legal acts served as a basis.

Keywords: continuous pedagogical education, development trends, democratization of education, diversity, informatization of education, quality of education, academic standard, professional standard, educational routes, model, conceptual model.

Кириш

Киёсий педагогика соҳасида охирги йилларда олиб борилган илмий — тадқиқот ишлари (Буюк Британия узлуксиз педагогик таълимининг турли жиҳатлари акс эттирилган D.Bridges [1], T.Kerry [2], J.Elliot [3] ларнинг илмий асарлари; МДҲ олимлари А.Г.Андреева [4], Д.Сабирова [5], Е.Б.Авазовикларнинг [6] тадқиқотлари; республикамиз тадқиқотчи-олимлари Ф.Ибрагимова [7], Г.Пирмоноваларнинг [8] диссертацион ишлари) алоҳида аҳамият касб этади.

Ушбу тадкикотларга таянган ҳолда Буюк Британия ва Ўзбекистонда ўкитувчилар тайёрлаш тизимининг қадриятли ва мақсадли асосларини таққослаш параметрлари аниқланди: жамият ва давлатнинг таълимга, педагог

ва ўкувчига нисбатан муносабати; давлат таълим сиёсатининг устувор йўналишлари ва принциплари; замонавий таълим ва ўкитувчилар тайёрлаш мақсад ва вазифалари; ўкитувчи шахси ва касбий тайёргарлигига нисбатан қўйилган талаблар.

Буюк Британия ва Ўзбекистонда ўқитувчилар тайёрлаш тизими таркибини таққослаш параметрлари: педагогик таълим даражалари; ўқитувчилар тайёрлаш моделлари ва бўлажак ўқитувчиларнинг таълим йўналишлари; ўқитувчилар тайёрловчи таълим муассасалари ва уларга қўйилган талаблар; узлуксиз педагогик таълим ва ўқитувчилар малакасини ошириш.

Буюк Британия ва Ўзбекистонда ўқитувчилар тайёрлаш мазмунини таққослаш параметрлари: давлат таълим стандартларининг таълим дастурлари ва натижаларига нисбатан талаблари; ўкув режа ва фан дастурлари мазмуни.

Буюк Британия ва Ўзбекистонда ўқитувчилар тайёрлашнинг ташкилий параметрлари: ўкув жараёнини ташкил этиш шакл ва методлари; таълим натижаларини баҳолаш мезон ва индикаторлари.

Таъкидлаш лозимки, бугунги кунда Буюк Британия ва Ўзбекистонда ўкитувчилар тайёрлаш жараёни жахон таълим тараккиёти тенденцияларини акс эттирувчи шароитларда ривожланиб бормокда. Айни пайтда ушбу тенденциялар Буюк Британия ва Ўзбекистоннинг маданий-тарихий, иктисодий ва таълимий ўзига хос хусусиятлари билан боғлиқ равишда турли хил даражаларда юзага чиқмокда: таълимнинг демократлашуви, яъни таълимнинг барча учун очиклиги, таълим муассасасини танлаш эркинлиги ва дастурларнинг вариативлиги.

Буюк Британияда педагогика таълим муассасаларини бошқариш ва молиялаштиришда марказлаштириш ва децентрализация, олий таълимнинг мактаблар билан шериклик моделининг жорий қилинишида намоён бўлади.

Ўзбекистон Республикасида ҳам охирги йилларда амалга оширилаёттан ислоҳотларда айнан ўхшаш тенденциялар кузатилмокда. Олий таълим муассасаларининг академик ва молиявий мустақиллигини таъминлаш, олий таълимнинг ишлаб чиқариш корхоналари ва илмий тадқиқот институтлари, мактаблар билан ўзаро манфаатли ҳамкорлигини йўлга қўйиш кабиларда ўз аксини топади.

Таълимнинг инсонпарварлашуви - Буюк Британияда персоналлашган (индивидуал) ўкитиш концепциясининг ривожланиши, касбий стандартлар талаблари, умумий ва педагогик таълимни ташкил этиш ҳамда қадриятли мақсадли асосларида ўз ифодасини топади. Ўзбекистонда ушбу тенденция таълим мазмунини инсонпарварлаштиришда ўз ифодасини топади.

Таълимнинг ахборотлашуви - ҳар икки мамлакатда ахборот олиш имкониятларининг янада кенгайиб бораёттанлиги, ахборот-коммуникацион технологияларнинг таълим жараёнига кенг жорий қилиниши, ўқитувчилар тайёрлаш, қайта тайёрлаш ва малакасини оширишнинг масофавий шаклларидан уларнинг амалий педагогик, методик, илмий-педагогик фаолияти сифатини оширишда кенг фойдаланилаёттанлигида ўз аксини топади.

Таълимнинг глобаллашуви - Буюк Британияда Болония жараёни доирасида педагогик таълимнинг ягона умумевропа таълим маконига интеграциялашувида, ягона академик ва касбий стандартлар ўкитувчилар тайёрлаш сифатини таъминлашда давлат ролининг кучайишида акс этади. Ўзбекистонда эса бу тенденция олий таълим муассасаларида таълим сифатини таъминлашда халкаро стандартларга таяниш, таълим жараёнини модул-кредит тизими асосида ташкил этиш, профессорталабалар алмашинувини ўкитувчилар фаоллаштириш, муассасаларида бўлажак мутахассисларнинг хорижий тилларни билиш такомиллаштириш каби вазифаларнинг жадал амалга оширилаётганлигида ўз ифодасини топмокда.

Буюк Британия ва Ўзбекистон Болония жараёни доирасида педагогик кадрлар тайёрлашнинг барча компонентлари бўйича умумий хусусиятларга эга.

Ўқитувчилар тайёрлаш мақсад ва қадриятларида:

- ҳар икки мамлакатда таълим давлат сиёсатининг устувор қадриятли йўналиши ҳисобланади;
- ҳар икки мамлакатда фуқаролар сифатли таълим олишда тенг имкониятларга эга;
- таълим мақсадлари ва қадриятлари, шунингдек, ўқитувчилар таёрлаш ҳақидаги тасаввурлар ахлоқий, демократик, гуманистик ғояларга асосланган бўлиб, ўқитуви шахси ва касбий талабларда ўз ифодасини топади;
- ўқитувчилар тайёрлаш жараёнининг кутилаётган натижалари стандартларда бўлажак ўқитувчи эгаллаши лозим бўлган компетенциялар йиғиндиси кўринишида қайд этилган.

Ўқитувичлар тайёрлаш мазмунида:

- ҳар икки мамлакатда ҳам ўқитувчилар тайёрлаш турли хил таълим йўналишлари ва мутахассисликлари бўйича амалга оширилади;
- Буюк Британия университетларида ўкув режалар ўкув модуллари, кредит бирликлар, ажратилган соат, ўкитиш боскичлари бўйича фанларнинг таксимоти, оралик ва якуний аттестация шакллари, амалиёт, мажбурий ва танлов кисмларидан иборат.

Ўзбекистон олий таълим муассасаларида ҳам 2020 йилдан бошлаб кредит-модул тизими асосида ўкув жараёни жорий этилган бўлиб, ўкув режалар мажбурий фанлар ва танлов фанлар, амалиёт ва аттестациялардан иборат. Буюк Британия ва Ўзбекистон педагогика олий таълим муассасаларида умумий жиҳатлар асосан шулардан иборат.

Буюк Британия ва Ўзбекистонда ўкитувчилар тайёрлашнинг ўзига хос хусусиятлари куйидагиларда намоён бўлади

Мақсад ва қадриятларда:

Ўзбекистондан фарқли ўларок, Буюк Британия педагогик таълим сиёсатида индивидуаллаштирилган ёндашув устуворлик касб этади. Бу ўз навбатида ўкитувчига ҳар бир ўкувчининг ўкув натижаларига алоҳида эътибор қаратиш имкониятини беради. Таълим жараёнида ҳар бир боланинг индивидуал эҳтиёжлари, қобилиятлари ва интилишларини инобатга олиб, ўкитишнинг турли стратегияларини қўллаш талаб этилади.

Ўзбекистондан фарқли ўлароқ, Буюк Британияда ўқитувчи тайёрлаш мақсади унинг иккита стандартга мослиги ҳисобланади: олий таълимнинг академик стандарти ва касбий стандарти ("малакали ўқитувчи статуси") ҳужжатини олиш билан боғлиқ.

Буюк Британия олий таълим муассасалари мактаблар билан шериклик килишга, ўз битирувчиларини ишга жойлаштиришга мажбур, чунки олий таълим муассасаларини молиялаштириш нафакат малакали ўкитувчи статусини олган битирувчилар сони, балки мактабда камида беш йил ишлаб берганлар сони билан боғлиқ.

Ўқитувчилар тайёрлаш структурасида:

Ўзбекистонда ўқитувчилар бугунги кунда педагогика университетлари, университетлар педагогика институтлари, таркибидаги педагогика институтлари тизимида тайёрланмокда. Британияда Буюк малакали ўкитувчиларни тайёрлаш университетларнинг педагогик бўлимлари, университет макомига эга коллежлар ва институтларда амалга оширилади.

Буюк Британияда ўқитувчилар тайёрлаш таркибан хилма-хил альтернатив йўналишларда, шунингдек, иш жойида тайёрланади, талабаларнинг индивидуал талаб ва эҳтиёжларига тез мослаша оладиган дастурларга эга.

Ўзбекистондан фарқли равишда, Буюк Британияда педагогика таълим муассасаларининг давлат мактабларида ишлашни ҳоҳловчи битирувчилари бир йил давомида стажировка ("лавозимга кириш") ўташга мажбурдирлар. Мактабларда устозлик тизими йўлга қўйилган.

Хар бир инглиз ўқитувчиси ҳар йили 18 кун (30 соат) дан иборат малака ошириш курсидан ўтиши шарт.

Ўқитувчилар тайёрлаш мазмунида:

Буюк Британияда Ўзбекистондан фаркли равишда, ўкитувчилар икки хил стандарт талабларига мос бўлиши талаб этилади: касбий ва академик (олий таълимнинг маълум бир даражасига мос стандарт).

Ўкитувчиларнинг касбий стандартида:

- ўқитувчи касбий фаолиятига нисбатан каръерасининг турли босқичларида талаблар белгиланган;
- ўқитувчи компетенциялари аниқ мезон ва кўрсаткичлар асосида белгилаб қўйилган;
- қуйилган талаблар узаро бир-бири билан чамбарчас боғлиқ булиб, рефлексия ва талабалар билан тескари алоқани назарда тутади;
- таълим муассасалари томонидан амалга ошириладиган ўқитувчилар тайёрлашнинг ташкилий талаблари белгилаб қуйилган;
- ўқитувчи тайёрлаш жараёни ҳамкасабалар билан ҳамкорлик қила олиш ва ўзини команда аъзоси сифатида ҳис этишга тайёрлашга; коммуникатив ва эмоционал компетентликка; рефлесия ва ҳар йили мустақил равишда ўз малакасини оширишни режалаштиришга; ўқувчиларнинг ўқув фаолияти натижаларини турли хил ёндашувлар асосида баҳолашга ва ҳ.к. йўналтирилган.

Англия педагогик кадрлар тайёрлаш ва ривожлантириш агентлиги (TDA) томонидан ишлаб чикилган касбий стандарт компетенциявий ёндашув асосида ўкитувчининг турли хил карьера боскичларида (ёш ўкитувчи, малакали ўкитувчи, эксперт ўкитувчи) хусусиятларини белгилаб беради.

Стандарт 3та ўзаро боғлиқ талаблар бўлимидан иборат:

- касбий сифатлар шаклланганлик даражасига;
- касбий билим ва тушунчалар шаклланганлик даражасига;
- касбий кўникмалар шаклланганлик даражасига.

Илмий манбалар тахлили бўйича хулоса қилиш мумкинки, Англияда ўқитувчилар тайёрлашнинг мослашувчан даражали тизими мавжуд. Ўқитувчилар тайёрлаш тизими бир нечта модел ва кўплаб таълим маршрутларини ўз ичига олади:

- 1. Параллел (concurrent/undergraduate) диплом даражаси;
- 2. Кетма-кет (consecutive/postgraduate) дипломдан кейинги даража;
- 3. Иш жойида тайёрлаш (In-Service/ Employment based Training) [9].

Буюк Британияда таълим дастурлари академик стандартлар асосида ишлаб чикилади. Халкаро лойихаларда, масалан, "Европада таълим

тузилмаларини мослаштириш" (Tuning Project) таъкидланишича, "таълим дастурларида талаблар таълим натижалари ва компетенциялар кўринишида ифодаланиши" зарур [10].

Таълим натижалари – бу таълим олувчи билиши ва тушуниши керак бўлган, таълим жараёни якунлангач, бажара олиши мумкин бўлган якуний натижадир.

Буюк Британияда Болония моделига мос равишда таълим дастурлари олий таълимнинг 3 та боскичида амалга оширилади: биринчи боскич - бакалавриат - параллел модель, иккинчи боскич - магистратура - кетма-кет модель, учинчи боскич - докторантура.

Буюк Британия Олий таълим муассасалари фан дастурлари ва ўкув режалари Винчестер, Глазго, Лондон университетлари мисолида таҳлил қилинди.

Биринчи цикл (бакалавриат) ўкув режалари қуйидаги блоклардан ташкил топган.

- 1. Таълим йўналишига боғлиқ бўлган дастурий блок (curriculum course) предметларга ўқитиш методикасини ҳам ўз ичига олади. Масалан, бўлажак бошланғич синф ўқитувчилари мактабда ўқитилиши керак бўлган барча фанларни ўрганадилар.
- 2. Касбий блок (professional course) ўз ичига турли комбинацияларда педагогиканинг умумий асослари, психология, мактаб гигиенаси ва педагогика тарихини ўрганишни ўз ичига олади.
 - 3. Мутахассислик фанлари блоки (specialist subject course).
- 4. Мактаб амалиёти (school practice) 4 йиллик дастури бўйича 32 хафталик, 2-3 йиллик дастур бўйича 24 хафталик.

Тадқиқотимиз манфаатларидан келиб чиқиб, биз Кембридж, Винчестер ва Глазго университетларида чет тили ўқитувчилари тайёрлашга мўлжаллланган дастурларни тахлил қилишга ҳаракат қилдик.

Касбий блокнинг асоси модуллари:

тил ўқитиш назарияси ва амалиёти, ўқувчиларнинг иккинчи тилни эгаллаш қобилиятлари, чет тилини ўрганишда адабиёт, тил ва ахборот воситалари, лисоний ва нутқий малакаларни шакллантириш принциплари, чет тили бўйича саводхонликни шакллантириш ва ҳ.к.

Британия педагогика олий таълим муассасалари дастурлари тахлили асосида куйидаги методлар ва технологиялар кенг кўлланилиши аникланди:

лекция (дискуссия элементлари мавжуд интерфаол маърузалар), семинар (презентация, 6-10 кишидан иборат кичик гурухларда тьюторлар

томонидан ўтказиладиган дебатлар), лойиха, мастер-класс, мустақил ўқув фаолияти, тадқиқот, тьюториал, стажировка, виртуал таълим мухитида назарий ва амалий машғулотлар, ролли ўйинлар, турли хил педагогик амалиётлар.

Талабалар университет, университетлараро конференция ва семинар, конкурсларда иштирок этишади.

Британия педагогика таълимининг ўзига хос жиҳатларидан бири — университетларда узок йиллар давомида кўлланилиб келинаётган тьюторлик тизимидир. Тьюторлик тизимининг мақсади — талабанинг ўқув фаолиятини тизимли ва доимий кузатиб бориш, унинг ўкиши ва хулқ-атворини назорат қилиш, ўкитувчи ва талабанинг ўзаро фаол муносабатларини ташкил этишдан иборат.

Таълим методлари талабаларнинг ўкув ютукларини назорат килиш ва бахолаш методлари билан узвий боғлик. Англия олий таълим муассасаларида бир неча боскич ва шакллардан иборат бахолашнинг жамғариладиган тизими мавжуд [11].

Назорат-баҳолаш методлари сифатида тест, эссе, презентация, ҳисобот, мавзу бўйича адабиётлар таҳлили, курс ишлари ва бошқалар қўлланилади.

Баҳолаш структураси жорий (formftive), якуний (summative) ҳамда амалий фаолиятни жорий ва якуний баҳолаш элементларидан иборат.

Лондон университетида бирламчи баҳолашдан (initial assessment) ҳам фойдаланилади. Жорий баҳолашнинг асосий шакли сифатида "шакллантирувчи" (formative) технологиядан фойдаланилади.

Портфолио, ўкув модуллари бўйича эссе, ёзма ва оғзаки топширикларни бажариш, презентациялар тайёрлаш кабилар ҳам жорий баҳолашда кенг қўлланилади. Британия таълим дастурларининг вариативлиги ўкув натижаларини баҳолаш шаклларини талабалар томонидан танлаш имкониятини беради.

Британия олий педагогик таълимининг яна бир ўзига хос жиҳатларидан бири битирувчиларга тўлиқ курсни тугатгач, тьютор томонидан "ўқитувчилик карьерасига кириш ва ривожлантириш" (Career entry and development profile) тавсифнома ва якуний аттестация тўгрисидаги ҳужжат (Final assessment form) берилади. Бу битирувчига мактабда синов йилига (Induction) киришишига рухсат беради.

Шундай қилиб, XXI асрда Англия ва Ўзбекистонда ўқитувчилар тайёрлаш тизимида етакчи тенденциялар қуйидагилардан иборат.

Хар икки мамлакатда ўқитувчилар тайёрлашнинг қадриятли асосларидан бири компетенциявий ёндашув бўлиб, бу ўз навбатида стандартлар структурасини белгилаб беради. Англия олий таълимининг

академик стандартлари умумий талаблар, йўналишлар, ҳар бир йўналиш бўйича таълим мазмуни ва даражасига нисбатан давлат талаблари, олий таълимнинг малакалари тўғрисидаги маълумотларни ўз ичига олади. Буюк Британияда 1998 йилдан бошлаб ўқитувчилар тайёрлаш соҳасида касбий стандартлар жорий этилган [12].

Ўзбекистонда педагогика олий таълим муассасаларида ягона стандарт, ДТС ва малака талаблари мавжуд бўлиб, педагогик таълимнинг касбий стандартини ишлаб чикиш бугунги куннинг долзарб вазифаларидан биридир.

Буюк Британия, жумладан, Англияда ўқитувчиларга узлуксиз касбий ривожлантириш учун ўзига хос шарт-шароитлар яратилган. Асосий мақсад ўқитувчиларнинг индивидуал эҳтиёжларига мос бўлиш ҳамда уларнинг касбий фаолияти сифатини оширишдир. Британия ўқитувчилар тайёрлаш тизимида бўлажак мутахассисларнинг умумий саводҳонлигига алоҳида аҳамият берилади. Шунинг учун Ўзбекистон таълим тизимидан фарқли равишда, Англия педагогика таълим муассасалари битирувчилари 2001 йилдан бошлаб математика, инглиз тили ва ахборот технологияларидан тестдан ўтадилар.



Расм 1. Ўзбекистон ва Англия педагогик таълим тизимининг умумий ва ўзига хос хусусиятлари

Хулоса

Амалга оширилган қиёсий таҳлил натижасида Буюк Британия ва Ўзбекистонда ўқитувчилар тайёрлашни ташкил этиш, ушбу соҳа тузилмаси,

мазмуни ҳамда мақсад ва қадриятларида умумий ва хусусий жиҳатлар аниқланди (1-расм). Натижада Ўзбекистон ва Буюк Британияда педагогик таълим тизимининг концептуал модели ишлаб чиқилди. Бу эса ўз навбатида республикамизда ўқитувчилар тайёрлаш борасида мавжуд муаммоларни илғор хорижий тажрибалар, жумладан, Буюк британия узлуксиз педагогик таълими сифатини ошириш борасидаги инновациялар асосида ҳал этиш имкониятини беради.

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HIGHER EDUCATION IN NEW UZBEKISTAN AT IMPORTANT STAGES OF REFORM: ACHIEVEMENTS, CHALLENGES AND SOLUTIONS

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Abstract: The education system has its significant role in the socio-economic development of any country. Because the role of education is important in educating young people who are spiritually mature, independent-minded, loyal to their homeland, have a strong life position, increase their place in the life of the state and society. Therefore, in the developed countries of the world, as in all areas, special attention is paid to the education of young people, raising their level of knowledge, mental and spiritual education. In this regard, consistent reforms are being carried out in the new Uzbekistan.

Uzbekistan, as a state in Central Asia, has its own place and potential. The country is home to more than 130 nationalities and 16 different religious denominations. Uzbekistan, which broke away from the former Soviet Union in 1991, has set its own path of independent development over the past 30 years. It has made great strides in all areas, and the state has followed and developed an alternative path of its own development. The last 5 years have gone down in history as a new era of Uzbekistan, where systemic reforms and innovations have been carried out in all areas. At the same time, the achievements and solutions to the problems in the field of higher education are also noteworthy.

Keywords: New Uzbekistan, higher education, reform, achievement, problem, university, institute, branch, foreign, decree, decision, student, strategy, ministry.

ВЫСШЕЕ ОБРАЗОВАНИЕ В НОВОМ УЗБЕКИСТАНЕ НА ВАЖНЫХ ЭТАПАХ РЕФОРМ: ДОСТИЖЕНИЯ, ПРОБЛЕМЫ И РЕШЕНИЯ

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Аннотация: Система образования играет важную роль в социальноэкономическом развитии любой страны, потому что роль образования важна в воспитании духовно зрелых, самостоятельных, преданных своей Родине молодых людей, обладающих сильной жизненной позицией. В развитых странах мира особое внимание уделяется образованию молодежи, повышению ее уровня знаний, умственному и духовному воспитанию. В связи с этим, в новом Узбекистане проводятся последовательные реформы.

Узбекистан, как государство в Центральной Азии, имеет свое собственное место и потенциал. В стране проживает более 130 национальностей и 16 различных религиозных конфессий. Узбекистан, который отделился от бывшего Советского Союза в 1991 году, за последние 30 лет выбрал свой собственный путь независимого развития. Страна добилась больших успехов во всех областях, и государство последовало и разработало альтернативный путь своего собственного развития. Последние 5 лет вошли в историю как новая эра Узбекистана, где во всех сферах были проведены системные реформы и инновации. В то же время, заслуживают внимания достижения и решения проблем в области высшего образования.

Ключевые слова: новый Узбекистан, высшее образование, реформа, достижение, проблема, университет, институт, филиал, иностранный, указ, решение, студент, стратегия, министерство.

In recent years, a phrase new Uzbek has entered the social life of the Uzbek state. A new era for a state with 30 years of independent development began in 2017, or rather after the election of President Shavkat Mirziyoyev as the head of state. The past 5 years of development have marked a turning point in the education system, as well as in all areas. These rapid reforms have also begun to find expression in the higher education system.

Uzbekistan, as a state in Central Asia, has its own place and potential. The country is home to more than 130 nationalities and 16 different religious denominations [1]. Uzbekistan has made great strides in all areas, and the state has followed and developed an alternative path of its own development.

In today's era of globalization, the issue of reforming social life in accordance with world standards, especially the construction of a just, humane, democratic and legal society in line with universal values, is urgent. It is not a secret that the education system has a special place in this. Since 2017, a new era has begun in the formation of a national education system in line with universal values in the new Uzbekistan. In particular, the further improvement of the higher education system, the establishment of education that meets international standards, the training of qualified personnel, the development of science has become one of the important issues. In this regard, at a meeting with leading scientists of the republic the President Shavkat Mirziyoyev stressed: "It is difficult to imagine the development of our country and society at the level of modern requirements without science. Fundamental research plays an important role in the development of science. It is through them that new knowledge is acquired and theories are formed, and a solid foundation is laid for future applied research and innovation".

In other words, on the initiative of the President Shavkat Mirziyoyev, attention has been paid to science in Uzbekistan on the basis of a new concept.

The Decree "On the Strategy of further development of the Republic of Uzbekistan" adopted on February 7, 2017, provides for the improvement of science and the system of continuing education, increasing the capacity of quality educational services, targeted measures have been taken to strengthen the material and technical base of educational institutions by equipping them with computer equipment and teaching aids. Effective mechanisms have been formed to stimulate research and innovation activities and to put scientific and innovative achievements into practice. Raising the level of science to the level of modern requirements, training educated personnel to meet modern requirements and raising the educational potential of Uzbekistan are reflected in the strategy [2].

Today, radical reforms and innovations in the field of education play an important role in the new Uzbekistan. These views are reflected in the Resolution of the President of the Republic of Uzbekistan dated April 20, 2017 "On measures to further develop the system of higher education". The resolution stressed the importance of educating young people in the spiritual and ideological spirit in today's fast-changing, violent times. In particular, it reads: "Carrying out largescale enlightenment and educational work to increase the spiritual and moral content of higher education, to instill in students a spirit of loyalty to the ideas of independence, high spirituality and national traditions of humanity, to strengthen their immunity and critical thinking against foreign ideas and ideologies". It includes the establishment of promising partnerships by each higher education institution with leading research and educational institutions abroad, the use of the most modern pedagogical technologies in the educational process based on international educational standards, wide introduction of educational programs and teaching materials, involvement of highly qualified foreign teachers and scientists in scientific and pedagogical activities.

It is important that in the new Uzbekistan it is planned to strengthen the material and technical base of higher education institutions, increase their scientific and methodological capacity, and further develop scientific research in the higher education system. Significant attention was paid to strengthening the integration of higher education institutions with academic science, increasing the effectiveness of scientific activities of the teaching staff, the wide involvement of talented students in scientific activities. In this regard, extensive work has been done at all levels of the education system, including the modernization of higher and secondary special education, the development of science, the introduction of modern forms and technologies of teaching. In particular, a number of decrees and resolutions have been adopted to radically improve the system of higher and secondary special, vocational education, further increase the efficiency of public administration in the

field, organize the training of highly qualified specialists to ensure the quality of institutions in the system.

But along with the achievements in the field over the years, a number of challenges have been identified. Problems in the field of higher education are particularly evident in the following:

First, the lack of optimization of entrance exams to higher education institutions has complicated the process of admission to higher education institutions, preventing young people from entering universities with genuine knowledge and potential;

Second, for many years, higher education standards have not been perfected on the basis of foreign experience, the number of non-specialty subjects has increased as a result of the reduction in the number of subjects taught and the increase in the number of subjects taught, the requirements made it somewhat difficult for them to acquire a full knowledge of their specialties;

Third, the material and technical base of higher education has not been sufficiently strengthened, no attention has been paid to the opening of new higher education institutions, and the current and capital repairs of higher education institutions have not been completed;

Fourth, there have been delays in the effective use of interactive methods and the results of innovative technologies in the educational process. The fact that students are taught on the basis of traditional education, as a result of which they are accustomed to acquire only ready-made knowledge, has led to an increase in red tape, neglect of the credit-module system of education.

Fifth, according to the analysis, the reforms carried out in the higher education system in the past did not have a deep scientific and conceptual basis in most places, It was found that the 1997 law "On Education" was outdated, did not meet modern requirements, and had some shortcomings in the implementation of the ideas put forward in its content. Therefore, on September 23, 2020, the new Law of Uzbekistan "On Education" was adopted. According to the law, the types of education are defined as follows:

- preschool education and upbringing;
- general secondary and secondary special education;
- professional training;
- higher education;
- postgraduate education;
- retraining and professional development of cadres;
- extracurricular education.

However, in today's period of rapid changes in the country, the period itself requires the reform of higher education, improving its material and technical base, further enhancing the quality of education, increasing the level of enrollment in higher education.

If we look at the numbers, according to the State Statistics Committee of Uzbekistan, in the period up to 2017, only 163 out of every 1,000 people aged 25 and older in the country had higher education. Only 12% of the country's population had higher education relative to the total population. If we compare this figure with the Central Asian republics, we see that the figure is much lower. For example, if we take into account that in 2017 Kazakhstan had a population of more than 17 million, there were 122 universities with more than 496,000 students. Kyrgyzstan has a population of more than 7 million and 56 universities in the country with more than 230,000 students. In Uzbekistan, in 2017, for more than 32 million people, there were only 81 higher education institutions, 15 regional branches, and 7 branches of foreign universities. By the end of 2016, the total number of students was 260,905 [3,4]. Based on the data of that period, Z. Saipov draws attention to the interesting information, citing infographics of the coverage of the population of Central Asia and Afghanistan with higher education. According to it, in terms of higher education coverage, Kazakhstan accounted for 54%, Kyrgyzstan for 41%, Uzbekistan and Afghanistan for 10%, and Turkmenistan for 8%.

It goes without saying that at that time these figures showed that the level of higher education coverage was much lower than in the Central Asian republics. In other words, the level of higher education in Uzbekistan was lower than the general population. This created a kind of monopoly in higher education, led to an increase in corruption, and led to the formation of a particularly unorganized youth stratum. However, the only way to solve the problem of unorganized youth is to involve them in education and employment. Only when young people have a specialty will they be engaged in the necessary training, and new jobs will be created. According to sociological surveys and research conducted among young people on this topic, those who fall into the ranks of unorganized youth without being able to study or get a job are more common among 18-27 year old (data were obtained as a result of sociological surveys conducted in the mahallas of Tashkent).

Therefore, in the new Uzbekistan, consistent reforms have been launched to radically reform higher education, increase the number and quality of higher education institutions, optimize admission processes, eliminate any bureaucratic barriers, eliminate monopolies in the field, and eliminate corruption in the system. In particular, new universities and institutes, branches of foreign higher education institutions have been opened, new directions and faculties have been established. Joint educational programs have been developed, agreements have been signed with universities and institutes of developed countries, and special attention has

been paid to the training and professional development of professors and teachers abroad. If we look at the numbers, in the new Uzbekistan by 2017 at the expense of newly established institutes and branches their number increased to 81, regional branches to 15, branches of foreign universities to 7 [5].

By the end of 2019, there were 18.5 million secondary and higher education personnel in the country. In the last 5 years, a number of Decrees and Resolutions have been adopted to further reform the higher education system. In particular, the Presidential Decree "On admission to higher education institutions of the Republic of Uzbekistan in the 2018-2019 academic year" provides for the opening of correspondence and evening education, for which the total quota is set at 30%. One of the major reforms was the introduction of 3-year education in some areas of the bachelor's degree and 1 year of education in some areas of the master's degree. As a result of the reforms, an 11-year system of general secondary education was introduced, and the content of vocational education was changed. In addition, more than 5,000 teachers with secondary special education have the opportunity to receive higher education in special correspondence departments established in 15 higher education institutions [6].

In 2018, cooperation with prestigious foreign higher education institutions was expanded. In 2019, practical measures were taken to open faculties and branches with universities in Russia, South Korea, the United States, Germany and Italy. Opportunities for undergraduate and graduate students to continue their studies abroad have been expanded. Because the more highly educated, highly qualified professionals in the society, the faster and more efficient the development will be. For example, in 2018, a total of 13 new higher education institutions will operate in the country, including the International University of "Silk Road" Tourism in Samarkand, the Almalyk branch of the "National Technological Research" University of the Russian Federal State Autonomous University, and the Puchon University of South Korea in Tashkent. began [7].

Over the past historical period, based on the needs of the real sector of the economy and the social sphere, new, including leading foreign higher education institutions have been established in the regions. Modern stages of education have been introduced, and a system of training in high-demand bachelor's and master's specialties has been set up. As a result, by 2020, 114 higher education institutions in Uzbekistan, including 93 local and 21 foreign higher education institutions and their branches, 6 new higher education institutions, 17 branches and 14 branches of foreign higher education institutions were established. Based on the proposals of personnel customers, 329 areas of education and 582 master's specialties were included in the classification of areas and specialties of higher education. Also, in the 2019/2020 academic year, part-time education was introduced in 59 higher education institutions, and evening education was introduced in 10 higher education institutions. As a result, the number of students studying in higher

education institutions in the country amounted to 410 thousand in the bachelor's degree and 13 thousand in the master's degree, which has increased 1.7 times over the past three years.

In addition, more than a dozen local higher education institutions and their branches have been established. For example, Chirchik State Pedagogical Institute of Tashkent region, Almalyk branch of Tashkent State Technical University, Termez branch of Tashkent State Technical University, Termez branch of Tashkent State Pedagogical University, Denau branch of Termez State University, Termez branch of Tashkent Medical Academy, Termez branch of Tashkent State Agrarian University, Uzbekistan Fergana regional branch of the State Institute of Arts and Culture. Among them is a branch of the Moscow Institute of Steel and Alloys in Almalyk and Webster University in Tashkent. Due to the demand and needs in the real sector of the economy, part-time and evening departments have been opened in higher education institutions. In addition, the Samarkand Institute of Veterinary Medicine, the University of Journalism and Mass Communications were established [8]. These are of great importance in expanding the scope of higher education, increasing the number of graduates.

By the Decree of the President of the Republic of Uzbekistan dated October 8, 2019, the "Concept of Developing the Higher Education System of the Republic of Uzbekistan until 2030" was adopted. The priorities of the systemic reform of higher education in this Concept are to raise the process of training highly qualified personnel with modern knowledge and high moral and ethical qualities to a qualitatively new level, modernization of higher education, strategic tasks for the development of the social sphere and the economy based on advanced educational technologies have been identified.

These tasks are aimed at overcoming the existing problems in the industry, the organization of the industry at the level of modern standards. In particular, on the basis of the development of public-private partnership in higher education, the organization of public and non-governmental higher education institutions in the regions, it is planned to increase the coverage of higher education by 50% by 2030. However, today the demand for reforms, life itself requires the rapid development of higher education. Therefore, the admission quota in Uzbekistan has been tripled. Now the coverage of graduates with higher education has increased from 9% in 2016 to 28% in 2021. It is planned to increase this figure to 50-60% in the near future. Supporting the population in need of social protection, especially young people, is a constant focus. For this purpose, in 2021, 3,155 quotas for young people with disabilities, 1,580 for graduates of orphanages and children's towns, and 2,000 additional quotas for women from low-income families were allocated as state grants.

Today's rapid changes require serious attention to the development of education on a modern basis, the orientation of young people to the profession, the training of a new generation. However, if we look at the world's best practices, we see that quality education cannot be free, and we are convinced that advanced higher education institutions are gradually moving towards self-financing. Today, the contractual form of education in higher education institutions financed from the state budget, including on the basis of increased fees, covers an average of 68% of the costs of higher education institutions, while the remaining costs are covered by the state budget.

Another peculiarity of the higher education system of Uzbekistan is that the proceeds from the payment-contract were used to pay scholarships to students studying on a contract basis, to provide them with financial assistance in the field of social protection, to strengthen the material and technical base of higher education institutions. Part of it will be spent on the provision of modern teaching, research and laboratory equipment and teaching aids, as well as other costs necessary to ensure the operation of the higher education institution. Expenditure of contractual forms of education in higher education institutions, including on a contractual basis, is open and transparent and is posted on the websites of higher education institutions and on the website of the Ministry of Higher and Secondary Special Education on a monthly basis.

Importantly, the average amount of scholarships for students of higher education institutions is determined by the distribution of available funds among students. This does not mean that there is no differentiated scholarship, there will no longer be any incentives for students. An additional percentage is added to the scholarships of students who have achieved good results in the system of higher education of the Republic, active in public affairs. Attendance is also an important criterion, and students will be required to attend classes on a mandatory basis in order to earn a credit module score. In all higher education institutions of the country, the participation of students in voluntary or voluntary-compulsory classes has not yet improved.

Because in today's era of popular cultural threats and globalization, the country's rapid reforms make it necessary to establish a system of training independent-minded personnel who are able to take responsibility for the country's future and make a worthy contribution to the country's development. The country's population and labor resources are growing rapidly.

Because Uzbekistan is the most populous republic in Central Asia (more than 60% of the region's population). It has the third largest population among the CIS countries (after Russia and Ukraine). Uzbekistan is a country of young people. The total proportion of children, adolescents and young people is about 70%, i.e. more than 2/3 of the republic's population, i.e. 32% of the country's population, or 10

million young people under the age of 30 [9]. Therefore, it is necessary to increase the level and quality of higher education by attracting them to study, to ensure their employment, to train educated personnel with spiritual and moral qualities.

In this regard, the new Development Strategy of Uzbekistan for 2022-2026, adopted on January 28, 2022, sets specific tasks to improve the quality of education. According to it, in 2022:

- a) Exemption from income tax of up to 3 million soums per month for parents sending their children to non-governmental preschools and schools from April 1, 2022;
- b) In order to bring the secondary education system in line with modern requirements, 605 billion soums will be allocated from the state budget for the implementation of the program of updating textbooks in secondary schools. In the priority direction of the strategy "Fair social policy, development of human capital" to create opportunities for every citizen to study in a specific profession at public expense, It is planned to double the scope of vocational training, to train a total of 1 million unemployed people in vocational training and to increase the participation of non-governmental educational institutions in this process to 30%. It envisages the full transfer of the issues of systematic vocational training to the Ministry of Employment and Labor Relations, doubling the scope of vocational training, vocational training of a total of 1 million unemployed people.

In accordance with the program "Digital Uzbekistan – 2030", the Ministry of Higher and Secondary Special Education has been tasked to improve the state youth policy. Most importantly, the program identified the following tasks:

Consistent increase of youth employment and real incomes, development of education and science, improvement of state youth policy, increase of family responsibility for raising children, organization of mobile receptions of mature and responsible specialists to ensure the interests of youth and minors;

Strengthening the ideological immunity of students, meeting the intellectual and spiritual needs of young people, educating a highly educated and intellectually developed generation, raising their spirituality and culture;

Development of national content, education in the state language, creation and promotion of modern information resources, multimedia products in accordance with the needs of young people, organization of national games for mobile Internet users, which serve to further educate young people, increase their intellectual potential and social activism;

Raising the pedagogical culture of parents, increasing the duties and responsibilities of raising children, educating young people with strong ideological immunity, children from troubled families, unorganized youth, unemployed, increase parental responsibility in controlling the behavior of young people

exposed to "popular culture", organize activities to prevent smoking, alcohol consumption and other disorders;

Measures to develop and implement a program of measures to combat religious extremism and missionary activity, to ensure interethnic and interfaith harmony.

At the current stage of development, by 2030, at least 10 higher education institutions in the country will be included in the list of the top 1,000 higher education institutions in the ranking of internationally recognized organizations, including, Inclusion of the National University of Uzbekistan and Samarkand State University in the list of top 500 higher education institutions, including the development of an action plan for the introduction of modern mechanisms of state support for these higher education institutions [7].

At the same time, there are a number of unresolved issues in the field, which, in our opinion, are reflected in the following:

- The content of educational programs on the organization of the educational process on the basis of modern technologies and the pace of their updating today do not fully meet the changing needs of the developing economy and the labor market;
- In an environment where digital technologies and distance learning opportunities are expanding around the world, the country is facing challenges in transitioning to distance and online learning. There is no systematic training of teachers in this area. This is due to the quality of teaching, its organization, as well as problems and difficulties with the communication system in the regions;
- Improving the material and technical base of higher education, the organization of the educational process, the integration of software into the content of education, the opening of modern training laboratories, meeting the requirements with a new generation of necessary textbooks, and manuals remain one of the most important issues;
- These include the employment of graduates, the creation of adequate conditions for them to find their place in the labor market, the support of gifted students to encourage gifted and active students.

Another important change in the field of education and science of the new Uzbekistan was the issue of reforming academic science in Uzbekistan on the basis of modern requirements. According to it, the system of the Republican Academy of Sciences has been improved, the material and technical base of the Academy has been strengthened, and a number of research institutes and centers have been restored. After a long break, the Academy of Sciences was re-elected, and talented scientists, who became famous in our country and internationally for their scientific work, were awarded the title of Academician [7].

In this regard, a number of organizational measures and practical work have been done in recent years. Among them are the measures taken to increase the role of academic science in society, the further development of scientific research and innovative scientific activity. An important event was the adoption on December 29, 2017 of the Decree of the President of the Republic of Uzbekistan "On approval of full members of the Academy of Sciences of the Republic of Uzbekistan". In accordance with the decree, the tasks of updating its composition with scientists who have thoroughly mastered modern science and technology, have advanced scientific and life experience, and have rendered special services in various fields of science have been identified.

If we look at our recent history, the last election for full membership of the Academy of Sciences was held in 1995. As of December 2017, there were only 63 full members left in the academy [7]. As a result of the revision of the industry, 9 research institutions in the country were returned to the Academy of Sciences, a number of scientific organizations were reorganized, 3 departments of the Academy of Sciences and the Navoi branch were established, the Public Council on Modern History of Uzbekistan was established [10]. In 2018, after a long hiatus of 22 years, the most eligible scholars were selected on a competitive basis for academic approval. 32 new full members of the Academy of Sciences have been approved on the recommendation of full members who are active in the development of science, education, culture and arts, sports [7].

The "Comprehensive Program of Measures to Strengthen the Infrastructure of Research Institutions and Develop Innovative Activities for 2017-2021" was adopted and systematic work was carried out in this area. Stimulation of research and innovation activities as the most important directions of development of science and education in the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021, serious attention was paid to the creation of effective mechanisms for the implementation of scientific and innovative achievements, the establishment of specialized scientific and experimental laboratories, high technology centers and technology parks at universities and research institutes.

In conclusion, the Decree "On the Development Strategy of the new Uzbekistan for 2022 - 2026" states that Goal 51 "Broad introduction of innovations in the economy, the development of cooperation between industrial enterprises and scientific institutions" confirms the importance of this area at the national level. In accordance with the development strategy, the implementation of 195 projects worth 165.9 billion soums, including the development of innovative products that are up to 50% cheaper than existing analogues and create 2-3 times higher value-added than the cost of raw materials. functions were approved [10]. Organization of fee-grant education in postgraduate education institutions, establishment of the International Agricultural University in cooperation with prestigious international

research centers and higher education institutions. Tasks to deepen the integration of science and practice in the agricultural sector have been identified.

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І. ВОПРОСЫ ПОВЫШЕНИЯ КАЧЕСТВА ВЫСШЕГО ОБРАЗОВАНИЯ

ОЛИЙ ТАЪЛИМ МАЗМУНИНИНГ ВАРИАТИВЛИГИ ВА ТАЪЛИМ ЭХТИЁЖЛАРИНИ ҚАНОАТЛАНТИРИШ ШАРТЛАРИ

Аскаров А. Д.

Аннотация. Мақолада олий таълим муассасалари олдига қўйилаётган уларнинг ўкув, ўкув-услубий вазифалар, жумладан такомиллаштириш, таълимнинг кредит тизимига ўтиш, ушбу тизимни жорий этиш натижадорлигига таъсир кўрсатувчи асосий омиллар, ўкув дастурларида вариатив ёндашувни жорий этиш муаммолари тахлили келтирилган. Асосий мақсад олий таълим муассасаларида таълимнинг кредит тизимини жорий этиш шарти хисобланган ўкув мазмунини сифатли шакллантиришга оид тавсиялар беришдир. Ўқув фани ёки модули бўйича Ишчи ўкув дастури таркиби учун энг асосий ва долзарб хисобланган мавзуларни ажратиб олиш билан боғлиқ мураккабликлар санаб ўтилган. Ишчи ўқув дастурларини талаба ва буюртмачилар муносабатларига асосланган холда вариативлаш назарияси ва амалиёти таклиф этилган. Вариативлаш учун икки боскичдан иборат алгоритмик модель қўлланилган (муносабатлар асосида берилган мавзулар сонига тенг бўлган бирламчи вариантларни ажратиш; бирламчи вариантларни ўзаро яхлитлаш орқали улар сонини минималлаштириш). Мазкур модель текшириш, самарадорлигини эхтиёжларни қаноатлантириш аниқлаш усуллари ўрганилган. Оптимал вариантларни аниқлаш бўйича келтирилган концептуал модельнинг мохияти ва ахамиятига оид хулосалар баён этилган.

Калит сўзлар: кредит-модуль тизими, ўкув мазмуни, ишчи ўкув дастури, муносабат, вариатив ёндашув, алгоритмик модель, оптимал вариант.

VARIABILITY OF THE CONTENT OF HIGHER EDUCATION AND CONDITIONS FOR MEETING EDUCATIONAL NEEDS

Askarov A. D.

Abstract. The article presents an analysis of the tasks assigned to higher educational institutions, including the improvement of their educational, teaching and methodological base, the transition to a credit system of education, the main factors affecting the effectiveness of the implementation of this system, the problems of introducing a variable approach to curricula. The main goal is to develop recommendations for the qualitative formation of the content of education, which considers the conditions for the introduction of the credit system of education in higher education institutions. The difficulties associated with the

separation of the most basic and relevant subjects for the preparation of a working curriculum for an academic subject or module are listed. The theory and practice of variation of working curricula based on the attitude of students and customers are proposed. For variation, a two-stage algorithmic model was used (allocation of primary options, which are equal to the number of topics, based on the given attitude; minimizing the number of primary variants by rounding them). Methods of checking the effectiveness of this model and determining the level of satisfaction of needs were studied. Conclusions about the essence and significance of the presented conceptual model for determining optimal options are described.

Key words. credit-modular system, educational content, working learning program, attitude, variable approach, algorithmic model, optimal variant.

Кириш

Бугунги кунда олий таълим тизими учун ОТМларни комплекс ривожлантириш, талаб юкори бўлган малакали кадрлар тайёрлаш тизимини тубдан такомиллаштириш ва илмий салохиятни оширишнинг асосий йўналишлари белгиланган [1]. Ушбу йўналишлар каторида худудлар, иктисодиёт тармоклари, илм-фан ва ижтимоий сохани ривожлантириш эхтиёжларини хисобга олиш, халкаро амалиётга мувофик таълим жараёнини режалаштириш, чукурлаштириш ва сифатини яхшилашни ташкил этиш вазифалари мавжуд.

Дунёдаги илғор олий таълим муассасаларида ўқув, ўқув-услубий базаси ва моддий-техник инфратузилмасини мустаҳкамлаш, ахборот технологияларини жадал ривожлантириш, илмий ва технологик парклар барпо этиш, ишлаб чиқариш корхоналари билан фаол ҳамкорлик ўрнатиш, ўқув жараёнини ташкил этиш ва олиб боришнинг кредит-модуль тизимини кенг жорий этишга алоҳида аҳамият қаратиб келинмоқда.

Таълимнинг кредит-модуль тизимига ўкув жараёнидаги асосий функционалликни, жумладан мустақил таълим олиш ва индивидуаллик орқали билимни оширишга бўлган ижодий ҳаракат, ўқув жараёнида таълим йўлини танлаш, билимлар ҳажмини оптимал белгилашни амалга оширувчи модел сифатида қараш мумкин.

Мамлакатимизда олий таълим ўкув мазмунини шакллантиришнинг махаллий ва хорижий тажрибасини, ягона таълим майдонига интеграциялаш, кредит-модуль тизимига ўтган университетлар фаолиятидаги устувор омилларни хар томонлама ўрганишни назарда тутадиган ўкув жараёнини ташкил қилишнинг кредит-модуль тизими жорий этилмокда [2].

Таълимнинг кредит тизими талабага йўналтирилган ўкитиш, таълим бериш ва бахолашнинг ошкоралиги тамойилига асосланган, синов бирликла-

рини йиғиш ва кўчириб ўтказишдан иборат, синов бирликларининг жамғариб бориладиган ўсиб борувчи синов бирликлари хисобини билдиради [3].

Ушбу тизимни жорий этишнинг асосий вазифалари:

ривожланган давлатларнинг илғор тажрибалари ва тавсияномалардан фойдаланган ҳолда, ҳалқаро таълим стандартларини жорий қилиш, малакали профессор-ўқитувчилар билан таъминлаш, сифатли ўқув дастурлари ва ўқув материалларини ишлаб чиқиш орқали таълим сифатини ошириш;

> хорижий олий таълим муассасалари билан талабалар, профессорўкитувчилар, изланувчиларнинг алмашинув дастурларини кенгайтириш;

➤ замонавий таълим технологиялари ва ўкув жараёнларини ташкил этишнинг самарали шаклларини ўзлаштириш орқали педагог кадрлар салохиятини оширишга кўмаклашувчи рақобат мухитини яратиш;

➤ талабага таълим дастурини мустақил шакллантириш имкониятини яратиш ва билимини баҳолашнинг ошкоралигини таъминлашдан иборат.

Бу борада амалдаги малака талаблари, ўкув режа ва дастурлари мазмун битирувчиларда амалий кўникмаларни шакллантиришга таълим йўналтирилмаганлиги, ИШ берувчиларнинг олий мазмунини шакллантиришдаги иштироки етарли эмаслиги, тайёрланаётган мутахассислар малакавий даражаси мехнат бозорининг замонавий талабларига етарлича жавоб бермаётганлиги каби ўз ечимини кутаётган бир қатор долзарб муаммо ва камчиликлар қайд этилган [2].

Тадқиқотимиз мақсади ушбу муаммога йўналтирилган бўлиб, олий таълим муассасаларида таълимнинг кредит тизимини жорий этиш шартлари ҳисобланган ўқув мазмунини сифатли шакллантириш омиллари ўрганилган.

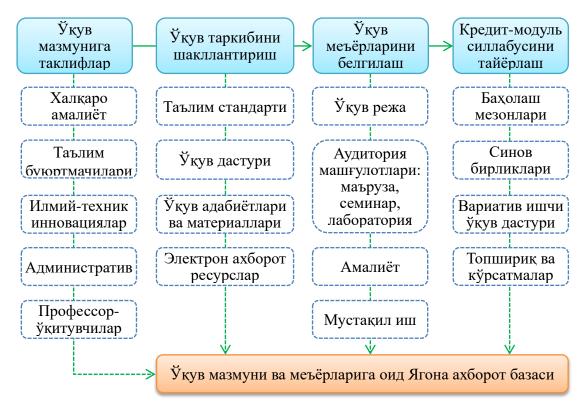
Методлар

Кредит-модуль тизимини жорий этишда таълим дастури тузилмасини ишлаб чикиш, унда кредитларнинг микдорини ўкув юкламаси асосида кўрсатиш, талабаларнинг таълим дастурини муваффакиятли ўзлаштириши ҳамда талаб қилинган малакага эга бўлиши учун меъёрлар аник белгиланади [4].

Умумий ҳолда таълимнинг кредитлаштирилган технологияси халҳаро умумтаълим стандартларига мос, таълим тўғрисидаги жаҳон анъаналарини ҳисобга олган универсалликни амалга оширувчи, таълим дастурлари вариативлигига ҳурилган механизм ҳисобланади.

Ўкув дастурлари вариативлиги ўкув жараёнини ташкил қилиш ва режалаштиришнинг илғор ёндашуви ҳисобланган кредит-модуль тизимини жорий этиш натижадорлигига ижобий таъсир кўрсатувчи асосий омил бўлиб

хизмат қилади ҳамда у одатда ОТМ ўқув мазмунини шакллантириш ва жорий этиш босқичлари таркибига киритилади (1-расм):



1-расм. ОТМ ўкув мазмунини шакллантириш ва жорий этиш боскичлари.

Ўқув дастурларида вариатив ёндашувни жорий этиш муаммолари таълим соҳасининг доимий муҳокама этилувчи мавзуси ҳисобланади [5-7].

Олимлар томонидан вариативлик назарияси ва амалиётидаги муаммолар, вариативликни шакллантириш тамойиллари кенг ёритилиб, вариатив ёндашувни шахснинг мотивация, функция ва харакат сохалардаги сифат ўзгариши, касбий тажрибанинг ўсиши, ривожланиши [8] эканлигини, вариативлик таълим эхтиёжлари ва шахснинг касбий кизикишларини кўпрок каноатлантириш, индивидуаллаштириш асосида таълим олувчининг шахсий ривожланиш имкониятларини кенгайтиришдан иборатлиги [9], вариатив мазмун кўзда тутилган таълимда ўзига хос самарали шакл ва методлардан фойдаланиш зарурлиги [10] таъкидланган.

Р.Аҳлидинов вариативликни таъминлаш учун ўқув режаси эгилувчан бўлиши, асосий компонентларни тўлдириш, бу компонентларнинг бирикуви, предмет ёки таълим соҳалари номенклатуралари, аниқ предметлар юкламаси ва доиралар, умумий юклама масалаларига эътибор қаратган [11].

Вариативлик — бу таълим тизими сифати бўлиб, бу тизимнинг ўкувчилардаги таълимга бўлган эхтиёж ва имкониятлари ўзгаришига мувофик танлаш максадида таълим дастурлари вариантларини яратишга ва такдим этишга қодирлигини характерлайди [12].

Олий таълим тизимида бирор ўкув фани ёки модули бўйича Ишчи ўкув дастури таркибини вариативлаш мураккаб жараён ҳисобланади, яъни таълим буюртмачилари ва жамоатчилик томонидан билдирилган таклифлар асосида бирор предмет ёки ўкув модули бўйича шакллантирилган ўкув таркиби ўзида максимал таълим эҳтиёжларини мужассамлаштирган бўлиб, улар ичидан ўкув режага мос вариатив Ишчи ўкув таркибларини ажратишнинг ўзига хос қийинчиликлари мавжуд.

Шундай бўлсада, таълим натижадорлигида ўкув фани ёки модулига ажратилган ўкув соатларидан келиб чиқиб, айнан ўқитиладиган қисмини ажратиб олиниши алохида аҳамиятга эга. Кўп ҳолларда умумий мавзулар тўпламидан Ишчи ўкув таркибини ажратиб олиш жараёнида ўкув мавзуларни яхлитлаш усулидан фойдаланилади, яъни ўкув фани ёки модулига тегишли янгиланган мавзулар таркибидан иборат катта ҳажмдаги тўпламдан энг асосий ва долзарб ҳисобланганлари ажратиб олинади ҳамда ажратилган ушбу тўплам ўкув жараёнига жорий этилади.

Умумий тўпламдаги айрим қисмларни хусусий тўпламга киритилмаслиги ёки яхлитлаш орқали қисқартирилиши натижасида таълим эхтиёжларини тўлик кондирилмаслиги юзага келиб, куйидаги холатлар кузатилади:

- ▶ танланган хусусий тўпламга оид билимлар талабаларда аввалдан шаклланган бўлиши;
- ➤ хусусий тўпламдаги айрим мавзулар талабанинг келгусидаги касбий фаолияти учун аҳамият касб этмаслиги;
- ➤ танланган тўпламга киритилмай қолган ёки қисқартирилган мавзулар буюртмачиларни кўпрок қизиқтириши ва зарур деб ҳисобланиши каби.

Бундай ҳолатда таълим мақсадини рўёбга чиқаришга салбий таъсири қуйидагиларда кўринади:

- ▶ талабанинг ўқув фаолиятида ўқув мазмуни билан боғлиқ бўлган мотивнинг пасайиши;
- ▶ ўқув жараёни мантиғи (мазмуни)нинг бузилиши, яъни самарасиз куч, вақт, маблағ сарфланиши;
- ▶ олий таълим тизими ривожланишида ретардация ҳолатининг юзага келиши.

Бундан кўринадики, амалдаги олий таълим ўкув фани ёки модули учун бундай ёндашув асосида танлаб олинган ўкув мавзу таркиби ижобий натижа, жумладан сифат ўзгаришларига эришишда кулай ҳисобланмайди.

Демак, талаба учун такдим этилаётган ўкув таркибининг вариативлигига эътиборни қаратиш, таълим дастурларини танлашга табақалаштирилган ёндашувни амалга оширишга шароит яратиш ахамиятлидир.

Аввалги тадқиқотларимизда ўқув таркибини вариативлашнинг амалга ошириш жиҳатидан мураккаб ҳисобланиши, ушбу мураккаблик вариативлаш жараёнида ҳосил бўлган фикрлар хилма-хиллиги ичидан аниқ параметрлар асосида тегишли вариантларни ажратиб олишда кўриниши, бу борада самарали технологиялар ишлаб чиқилмаганлиги таъкидланган [13]. Бундай илмий изланишларимизни олий таълим тизими менежменти учун давом эттириб, талаба ва буюртмачилар талабларидан келиб чиқувчи, натижани мавжуд билим ва малакалар ҳамда қизиқишлар «устига қуриш»ни таъминлашга қаратилган Ишчи ўқув дастурларини вариативлаш, яъни мураккабликни ҳал этиш ва ўқув модуллари учун энг оптимал вариантлар кўринишидаги ўқув таркибини ажратиш, мавжуд хулосаларни олий таълим тизими учун янада такомиллаштириб, эҳтиёжга асосланган Ишчи ўқув дастурларини шакллантириш назарияси ва амалиётини жорий этиш таклифи ишлаб чиқилди.

Ишчи ўқув мазмунининг энг оптимал вариантлар кўринишидаги ўқув таркибини ажратишда умумий ўқув таркибини ўқитувчилар, буюртмачилар, таклиф берган ташкилотлар ва жамоатчилик муҳокамасига қўйиш, уларнинг муносабатларини ўрганишга аҳамият қаратиш мақсадга мувофиқ.

Умумий характердаги ўқув мавзулари таркибидаги ҳар бир мавзуга муносабат билдирувчилар "зарур"-Z, "қисман зарур"-QZ, "аҳамиятсиз"-A танловлардан бирини белгилаб, ўзининг индивидуал муносабатини билдиради. Шу тариқа ҳар бир мавзуга билдирилган муносабатлар тўплами ҳосил бўлади.

Вариативлаш ўкув режадаги соатлар доирасида ажратилиши керак бўлган мавзулар сонига (*m*) кўра: 1) муносабатлар асосида берилган мавзулар сонига тенг бўлган бирламчи вариантларни ажратиш; 2) бирламчи вариантларни ўзаро яхлитлаш орқали улар сонини минималлаштиришдан иборат алгоритмик моделлаштириш асосида амалга оширилади.

1) Муносабатлар асосида берилган мавзулар сонига тенг бўлган бирламчи вариантларни ажратиш: Ишчи ўкув дастури вариантлари бевосита муносабат билдирувчиларнинг Z ("зарур") муносабатига боғлиқ бўлиб, бу уларнинг эхтиёжлари хисобланади ва оптимал вариантларни белгилашда асосий ўрин тутади. Дастлаб мавзулар бўйича барча муносабатлар ($\{a_{ji}\}$, $i=\overline{1,u}$, $j=\overline{1,n}$) ичидан Z муносабатли мавзулар

ажратилиб $(a_{ji} = Z)$, ушбу мавзуларга мос келувчи бошқа мавзулардаги Z муносабатлар сони аниқланади. Бу шартни қуйидагича ифодалаш мумкин:

$$l_i^k(Z) = \begin{cases} 1, a_{ji} = a_{ki} = Z \\ 0, \text{акс холда} \end{cases}, k = \overline{1, n}$$
 (1)

Бу ерда, $l_i^k(Z)$ мавзуларнинг мослик шарти, a — муносабат, u — иштирокчи сони, i — иштирокчи рақами, n — мавзу сони, j — танланган мавзу рақами, k — солиштирилаёттан мавзулар рақами.

Барча мавзулар бўйича шарт бажарилган Z сонини қуйидагича ҳисоблаш мумкин:

$$S_{i}^{k}(Z) = \sum_{i=1}^{u} l_{i}^{k}(Z)$$
 (2)

Хисобланган қийматларни камайиш тартибида жойлаб, катта қийматли m таси (ўқув режадаги соатлар доирасида ажратилиши керак бўлган мавзулар сонига кўра) ажратилади ҳамда уларнинг индекслари (мавзу рақами) фиксирланади. Ушбу фиксирланган мавзулар тўплами j-мавзу бўйича бирламчи вариант дейилади (V_j).

Агар $S_j^k(Z)$ ичидаги энг катта қийматлилар сони m дан катта бўлса, яъни бир нечта мавзулар учун қийматлар тенг бўлса, улар энг кичик $S_j^k(A)$ қиймат асосида қайта танланади:

$$S_{i}^{k}(A) = \sum_{i=1}^{u} l_{i}^{k}(A)$$
 (3)

бу ерда

$$l_i^k(A) = \begin{cases} 1, a_{ji} = Z \text{ ва } a_{ki} = A \\ 0, \text{акс холда} \end{cases} k = \overline{1, n}$$
 (4)

Агар $S_j^k(A)$ ларнинг энг кичик қийматлиларида ҳам ўзаро тенглик кузатилса, яъни қиймат бир неча мавзулар учун бир хил бўлса, у ҳолда улар энг катта $S_j^k(QZ)$ қиймат асосида қайта танланади:

$$S_i^k(QZ) = \sum_{i=1}^u l_i^k(QZ) \tag{5}$$

бу ерда

$$l_i^k(QZ) = egin{cases} 1, a_{ji} = Z \text{ ва } a_{ki} = QZ \\ 0, \text{акс холда} \end{cases}, \ k = \overline{1,n} \ \ (6)$$

Шу билан бирга, агар бирор мавзу бўйича «ноль» қиймат қабул қилган $S_j^k(Z)$ лар сони билан мавзулар сони айирмасининг модули m дан кичик бўлса, мазкур мавзу бўйича бирламчи вариант мавжуд эмас деб ҳисобланади.

Кўриниб турибдики, ҳосил бўлган бирламчи вариантлар сони кўпи билан n та, яъни мавзулар сонига тенг бўлиши мумкин.

2) Бирламчи вариантларни ўзаро яхлитлаш орқали улар сонини максимал камайтириш: Ушбу қадамда мавзулар бўйича бирламчи вариантлар мумкин қадар камайтирилади. Бунинг учун j-мавзу бўйича бирламчи V_j вариантнинг мавзуларини бошқа бирламчи вариант мавзулари билан таққослаб, мавзулари V_j да тўлик такрорланган (яъни $V_t \cap V_j$ бўлган) ёки мавзулар умумий сонининг ҳеч бўлмаганда 4/5 қисмидан ортиғи такрорланган (яъни, $\frac{s\{v_t \cap v_j\}}{m} \ge 4/5$ бўлган) вариант ажратиб олинади. Ҳар икки вариантдаги иштирокчиларнинг A (аҳамиятсиз) муносабатлари ўртасидаги алоқадорлик ўрганилади. Бунинг учун дастлаб V_t вариант мавзулари орасида мавжуд бўлмаган V_j нинг x мавзулари бўйича $S_t^x(Z)$ ва $S_t^x(A)$ лар ажратилади.

Агар барча x мавзулар учун $S_t^x(A)$ ҳамда $S_t^x(Z)$ ҳийматларнинг ўзаро нисбати 1/3 дан кичик, яъни

$$\frac{S_t^{\chi}(A)}{S_t^{\chi}(Z)} \le \frac{1}{3} \tag{7}$$

бўлса, V_t да V_j ни инкор этувчи мавзу мавжуд эмас, деб топилиб (нисбий холда), ушбу вариантлар V_j га яхлитланади, акс холда V_t вариант V_j га яхлитланмайдиган вариант деб топилади.

Юқоридаги шартлар V_j вариант буйича бошқа вариантлар учун ҳам текширилади ва V_j вариантта мос яхлитланувчи вариантлар туплами ажратилади. Бундай вариантлар учун V_j вариант – оптимал вариант дейилади.

$$O = V_j \tag{8}$$

Юқоридаги $\frac{S\{V_t\cap V_j\}}{m} \ge 4/5$ шарт бажарилган ҳолларда V_t вариант мавзуларини бошқа бирламчи вариантларда такрорланиш кўрсаткичини ҳам кўриб чиқиш зарур. Чунки, қайсидир V_k вариантда $\frac{S\{V_t\cap V_k\}}{m} \ge \frac{S\{V_t\cap V_j\}}{m} \ge 4/5$ бўлиши ҳам мумкин. Бу эса V_t ни V_k бирламчи вариантга яхлитлаш мақсадга мувофиқлигини кўрсатади.

Бирламчи вариантларни ўзаро яхлитлаш орқали улар сонини максимал камайтириш учун белгиланган юқоридаги амаллар барча вариантлар устида қайта бажарилади ва оптимал вариантларни аниқлаш давом эттирилади. Бирор бир бирламчи вариантга нисбатан юқоридаги таққослаш шартларини қаноатлантирувчи ўхшаш вариантлар мавжуд бўлмаган холларда, ушбу вариант навбатдаги оптимал вариант хисобланади.

Шу тарзда 0_r оптимал вариантларни аниклаб, концептуал моделлаштиришимизнинг вариантлар сонини минималлаштириш шарти хам

бажарилганлигини кўришимиз мумкин. Бу ерда, r-оптимал вариантлар рақами (r=[1..R], R-оптимал вариантлар сони).

Ишчи ўкув таркибини вариативлаш бўйича келтирилган алгоритмик моделнинг самарадорлигини текшириш мухим ахамиятга эга. Бунинг учун дастлаб, муносабат билдирган иштирокчиларни мумкин қадар қаноатлантирувчи оптимал вариантлар ажратилади, яъни аникланган оптимал вариант мавзулари (b_{kO_r}) муносабатлар билан солиштирилади ва хар бир оптимал вариант мавзуларига мос Z, QZ, A лар сонидан иборат $\{C_i^{O_r}(Z)\}$, $\{C_i^{O_r}(QZ)\}$, $\{C_i^{O_r}(A)\}$ тўпламлар хосил қилинади. Бу ерда $i=\overline{1,u}$ ва O_r-r рақамли оптимал вариант (r=[1..R], R-оптимал вариантлар сони).

 $\left\{ \mathsf{C}_{i}^{\mathit{O}_{r}}(Z) \right\}$ тўпламларнинг ҳар бир элементи қуйидагича ҳисобланди:

$$C_i^{O_r}(Z) = \sum_{j=1}^n l_i(Z) \tag{9}$$

бу ерда
$$l_i(Z) = \begin{cases} 1, a_{b_{kO_r}i} = Z \\ 0, \text{акс холда} \end{cases} k = \overline{1, m}$$

 $\left\{ \mathsf{C}_{i}^{\mathit{O}_{r}}(\mathit{QZ}) \right\}$ тўпламларнинг ҳар бир элементи қуйидагича ҳисобланди:

$$C_i^{O_r}(QZ) = \sum_{i=1}^n l_i(QZ) \tag{10}$$

бу ерда
$$l_i(QZ) = \begin{cases} 1, a_{b_{kO_r}i} = QZ \\ 0,$$
акс холда $k = \overline{1,m}$

 $\{C_i^{O_r}(A)\}$ тўпламларнинг ҳар бир элементи қуйидагича ҳисобланди:

$$C_i^{O_r}(A) = \sum_{j=1}^n l_i(A)$$
 (11)

бу ерда
$$l_i(A) = \begin{cases} 1, a_{b_{kO_r}i} = A \\ 0, \text{акс холда} \end{cases} k = \overline{1, m}$$

 $b_{kO_r}-\ O_r$ оптимал вариантнинг k-элементи.

 $\left\{\mathsf{C}_i^{\mathit{O}_r}(Z)\right\}$ тўпламнинг энг катта p-элементи $(c_{pi}(Z) = \mathsf{SUP}\{\mathsf{C}_i^{\mathit{O}_r}(Z)\}, p = [1..R])$ учун куйидаги шартлар текширилади:

1-шарт.

$$\frac{c_{pi}(Z)}{m} \ge \frac{1}{3} \tag{12}$$

2-шарт.

$$c_{pi}(Z) \ge c_{pi}(A) \tag{13}$$

бу ерда
$$c_{pi}(A) - \mathsf{C}_i^{O_r}(A)$$
 нинг p -элементи.

Хар иккала шарт бажарилган тақдирда O_p оптимал вариант i-иштирокчининг эҳтиёжларига мос келувчи вариант ҳисобланди. Мазкур иштирокчи учун оптимал вариант (O_p) нинг ҳаноатлантириш кўрсаткичи

$$\frac{c_{pi}(Z)}{m} \cdot 100, \quad \frac{c_{pi}(QZ)}{m} \cdot 100, \qquad \frac{c_{pi}(A)}{m} \cdot 100 \quad (14)$$

лардан иборат бўлиши, яъни бир вақтнинг ўзида 3 та қиймат билан ўлчаниши қабул қилинди.

Агар ҳар икки шарт бажарилган энг катта элементлар сони биттадан ортиқ бўлса (масалан, $c_{pi}(Z) = c_{fi}(Z)$, f=[1..R]), у ҳолда ушбу элементларга мос $c_{pi}(QZ)$ ҳамда $c_{fi}(QZ)$ ларнинг каттасига нисбатан, агар ушбу элементларнинг ҳам тенглиги аниҳланса, $c_{pi}(A)$ ҳамда $c_{fi}(A)$ ларнинг кичик ҳийматлисига нисбатан i-иштирокчи учун оптимал вариант аниҳланади.

Шу билан бирга $\{C_i^{O_r}(Z)\}$ тўпламнинг энг катта элемент (p)га нисбатан камайиш тартибида бошқа элементлари учун ҳам юқоридаги шартлар бажарилиши мумкин ва бундай ҳолат мазкур иштирокчи учун оптимал вариантнинг биттадан ортиқ эканлигини англатади.

Куйидаги иккита холат мазкур шартларнинг бажарилмаслигига олиб келади: 1) иштирокчи томонидан сўровнома нотўгри тўлдирилган, яъни муносабатлар онгли амалга оширилмаган бўлса; 2) сўровномага киритилган мавзулар хақиқатдан хам иштирокчини қаноатлантирмаса (кўп холларда ушбу иштирокчи A (ёки QZ) муносабатни танлаган).

Бундай холларда иштирокчи муносабатларини индивидуал тарзда ўрганиб чикиш тавсия этилади.

Иштирокчиларнинг муносабатларини оптимал вариантларга максимал мослиги даражасини хисоблаш куйидагича амалга оширилди:

$$\frac{c_{pi}(Z)}{m} \cdot 100 + \frac{c_{pi}(QZ)}{m} \cdot 100 - \frac{c_{pi}(A)}{m} \cdot 100$$

Шундай қилиб, оптимал вариантнинг муносабатларга мослик даражасини аниқлаш учун қуйидаги мезонларни киритиш мумкин:

Юқори – вариантларнинг муносабатларга 100 % мос келиши;

Етарли – вариантларнинг муносабатларга 86-99 % мос келиши;

Ўрта – вариантларнинг муносабатларга 71-85 % мос келиши;

Паст – вариантларнинг муносабатларга 56-70 % мос келиши;

Ўта паст – вариантларнинг муносабатларга 0-55 % мос келиши.

Агар юқоридаги ифоданинг қиймати 0 дан кичик бўлса, у холда мазкур иштирокчининг эҳтиёжини танланган вариантларнинг бирортаси қаноатлантирмайди, деб хулоса чиқариш мумкин ва бунда иштирокчи мавзуларнинг катта қисмига ижобий муносабат билдирмаган бўлади.

Тахлил ва натижалар

Келтирилган алгоритмик модел, яъни ўкув мавзулари таркибини вариативлаштириш 2-расмдаги боскичларда амалга оширилиши мумкин.



2-расм. Вариативлашни амалга ошириш босқичлари.

Вариативлаш жараёни самарадорлигини ошириш мақсадида мавзуларга билдирилган ҳар бир иштирокчининг муносабатларини саралаш ва тегишли параметрлар асосида оптимал вариантларни автоматик тарзда ажратувчи "ОТМ ишчи дастурларининг оптимал ўқув вариантларни танлаш дастурий маҳсулоти" ишлаб чиқилди.

Оптимал вариантларни аниклаш бўйича келтирилган концептуал моделнинг самарадорлиги куйидаги ташкилий масалаларнинг тўғри амалга оширилишига боғлиқ бўлиб, улар буюртмачилар муносабатларини ўзаро якинлашувига олиб келади:

- муносабат учун қўйиладиган мавзуларнинг ишончлилиги;
- мавзуларнинг вазни ва вариант элементлари сонининг тўғри белгиланиши;
 - сўровноманинг тўгри ва холис ўтказилиши;

- аниқланган оптимал вариантларнинг таҳлил қилиниши ҳамда муҳокамадан ўтказилиб, жорий этилиши.

Кредит-модуль тизимида эҳтиёжга асосланган вариатив ўқув мавзуларини жорий этиш имкониятлари юқори ҳисобланиб, бунда эҳтиёжлар (ва муносабатлар) асосида турлича вариантдаги ўқув мавзулари жамланмасини талабаларга тақдим этиш жараёни амалга оширилиши мумкин. Бу эса:

- талабанинг ўкув модулларини танлаш имкониятларини ва сифатини ошириш;
- янгиланган ва чукурлаштирилган касбий билимлар, ҳосил бўлган малака ва кўникмаларнинг амалиёт бирлигини таъминлаш;
 - талабалар контингентини даражалаш;
- танлов кўрсаткичлари асосида ўкув мавзулари (дастури)ни ўз вақтида янгилаб, такомиллаштириб бориш имконини беради.

Шундай қилиб, кредит-модуль тизимида ўқув таркибининг вариативлиги бу - таълим эҳтиёжларига кўра шаклланган умумий ўқув мазмунини буюртмачиларнинг муносабатларидан келиб чиқиб, ўқув меъёрларига мувофиқ муқобиллаштириш, деган хулосага келишимиз мумкин.

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ПРЕДПОСЫЛКИ ДЛЯ ОНЛАЙН-ИЗУЧЕНИЯ СОЦИАЛЬНОГО МЕДИА МАРКЕТИНГА

Хожиева И. А.

Аннотация: Сегодня, в период расцвета цифровой экономики, многие отрасли перешли в режим онлайн и подключились к Интернету. Социальный медиа маркетинг также является частью цифровой экономики, и спрос на исследования в этой области растет. В статье анализируются условия онлайнизучения социального медиа маркетинга в Узбекистане. Обсуждаются следующие вопросы: каковы предпосылки для изучения онлайн-маркетинга в социальных сетях? А также: каков SWOT-анализ онлайн-обучения маркетингу в социальных сетях в Узбекистане? Чтобы ответить на этот вопрос, применена двухэтапная методология исследования. В SWOT анализе приводятся сильные и слабые стороны, возможности и потенциальные риски онлайн-обучения социального медиа маркетинга в Узбекистане.

Ключевые слова: социальный медиа маркетинг, образование, онлайнобразование, офлайн-образование, преподавание, обучение, цифровая экономика.

BACKGROUND FOR ONLINE STUDY OF SOCIAL MEDIA MARKETING

Xojiyeva I. A.

Abstract: Today, at a time when the digital economy is booming, many industries have become online and connected to the Internet. Social media marketing is also part of the digital economy, and there is a growing demand for research in this area. This article analyzes the conditions for online study of social media marketing in Uzbekistan. The following questions are discussed: What are the prerequisites for learning online social media marketing? And also: what is the SWOT analysis of online training in social media marketing in Uzbekistan? To answer these questions, a two-stage research methodology was carried out. The SWOT analysis highlights the strengths, weaknesses, opportunities and potential risks of online social media marketing training in Uzbekistan.

Keywords: social media marketing, education, online education, offline education, teaching, learning, digital economy.

Введение

Развивающаяся волна цифровой экономики – это начало перехода к новому опережающему развитию, что связано не только с онлайнреволюцией, но и с модернизацией и реконструкцией системы образования. Влияние таких факторов, как глобализация образования, трансформация системе образования, экономического инновационной образования, создание системы непрерывного образования, образование рассматривать экономическое как неотъемлемую глобального частного образования. Социально-экономическая ситуация в обществе Узбекистана определила динамику экономических изменений, превосходство процессов, доказывающих личности над динамикой способности к адаптации к ним. Полученные знания и сформированные в обучения экономические знания ограничены, изучаемые нормативные документы И ценности не становятся постоянными ориентирами в меняющемся времени, поэтому персонал переоценивает себя в процессе работы.

Происходящие в Узбекистане изменения выявили серьезные недостатки в специалистах, обладающих знаниями и опытом принятия решений в условиях рыночной экономики, и показывают, что потребность в таких специалистах растет. Проводимые в Узбекистане экономические реформы требуют готовности населения к переходу к рынку, принятию основных экономических понятий и законов общественной жизни.

Сегодня социальный медиа маркетинг является одной из самых востребованных областей и спрос на менеджеров по маркетингу в социальных сетях растет. Спрос на эту отрасль растет, особенно после пандемии, поскольку все предприятия перешли на онлайн-покупки, что привело к увеличению спроса на маркетинговые исследования в социальных сетях.

На сегодняшний день существует множество курсов в этой области по всему миру, которые предоставляют свои услуги как онлайн, так и офлайн.

Преподавание маркетинга в социальных сетях во многих частных учебных заведениях Республики Узбекистан предлагает курсы по этому направлению. Даже независимо друг от друга люди изучают социальный медиа маркетинг на многих веб-сайтах, каналах YouTube или других образовательных платформах.

Однако в системе высшего образования преподавание в вышеуказанной области не получило широкого распространения. Поэтому целесообразно преподавать социальный медиа маркетинг на базе вузов, на их онлайнплатформах. Организованный в виде курса, он был бы очень полезен для студентов, которые за короткий промежуток времени стали бы специалистами в нужной области. Давайте ответим на вопрос, что такое социальный медиа маркетинг? Социальные сети создают цифровые каналы связи для взаимодействия с клиентами и требуют внимания к расширению понимания маркетинга [1].

Как мы видим, социальный медиа маркетинг — это отрасль маркетинга, которая сегодня эквивалентна проведению исследований с использованием социальных сетей. Социальные сети являются частью повседневной жизни. Взаимодействие через виртуальные платформы, такие как Facebook, Instagram, Twitter, YouTube, Line, LinkedIn, Pinterest и другие, иллюстрирует ориентацию и поведение в отношении всех типов технологий социальных сетей [2].

В настоящее время большое количество клиентов тратят свое время на социальные и цифровые сети для самых разных целей, от поиска информации до окончательной покупки продуктов. В ответ на этот сдвиг маркетологи тратят значительную часть рекламного бюджета на цифровой маркетинг [3].

Поэтому спрос на это направление растет и необходимо изучить условия онлайн-обучения в этой сфере.

Что такое онлайн-обучение и как его можно использовать для обучения социального медиа маркетинга? Мы ищем ответы на эти вопросы. Итак, что такое онлайн-образование?

Студенты, зачисленные на курсы подготовки учителей в 2020 году, будут иметь углубленный опыт онлайн-образования, что может оказать долгосрочное влияние на их концептуализацию образования.

Контекстные факторы, в том числе цифровая готовность сообщества и его граждан, оказывают большое влияние на процесс обучения (т. е. на то, как представляются и разрабатываются онлайн-курсы). Поскольку страны различаются по своей готовности к цифровым технологиям, мы можем ожидать различий в обеспечении онлайн-обучения, что, в свою очередь, приводит к различиям в восприятии учащимися онлайн-обучения [4].

В предыдущих работах были проведены исследования по маркетингу в социальных сетях и системам онлайн-обучения, а также методам проектирования обучения, но конкретно не написано об обучении онлайн-маркетингу в социальных сетях с помощью методов проектирования. Поэтому эти вопросы будут рассмотрены в данной статье.

Согласно Постановлению Кабинета Министров Республики Узбекистан от 20 октября 2018 года № 841 «О мерах по реализации национальных целей и задач в области устойчивого развития до 2030 года» поставлена задача по обеспечению образования и поощрения доступа к обучению на протяжении всей жизни для всех [5].

Для достижения этой национальной цели предлагается изучение актуального на сегодняшний день социального медиа маркетинга как курс через онлайн-платформы образования экономических вузов и анализируются возможности для этого.

Методы

Первый вопрос: каковы предпосылки для изучения онлайн-маркетинга в социальных сетях?

Второй вопрос: каков SWOT-анализ онлайн-обучения маркетингу в социальных сетях в Узбекистане?

Чтобы ответить на этот вопрос, нами применена двухэтапная методология исследования.

1. Обзор литературы

Идентификация и сбор литературы начинаются с тем, касающихся влияния маркетинга в социальных сетях на спрос образования. Сбор литературных данных осуществлялся с помощью ведущих журнальных источников, таких как ScienceDirect, emerald Insight и Google Scholar. Проанализированы отобранные статьи из научно-исследовательских журналов международного уровня. В критериях включения использовались ключевые слова, связанные с «маркетингом в социальных сетях», «цифровой

экономикой», «онлайн-обучением» чтобы выделить публикации, имеющие прямое отношение к маркетингу в социальных сетях. дополняют существующую теорию. Поиск сосредоточен на исследованиях, посвященных онлайн-образованию. В выбранных статьях используются только научные публикации на английском языке. Выбор ключевых слов, связанных с дистанционным обучением, онлайн-обучением.

2. SWOT- анализ

Исследователь анализирует сильные и слабые стороны, возможности и потенциальные риски онлайн-обучения маркетингу в социальных сетях в Узбекистане.

Результаты и обсуждение

1. Каковы предпосылки для изучения онлайн-маркетинга в социальных сетях?

По мере развития онлайн-инструментов и технологий, социальные сети стали рассматриваться как ключевой инструмент поддержки прикладной учебной деятельности.

Технологии социальных сетей предоставляют преподавателям средства для вовлечения учащихся в ценное время обучения [6].

Пользователи социальных сетей являются активными участниками культуры социальных сетей, создавая пользовательский контент [7]. Технологии социальных сетей предоставляют преподавателям средства для вовлечения учащихся в ценное обучение [8].

То, как компании позиционируют себя на рынке, меняется в результате социальных сетей, создавая новые препятствия, а также возможности [9]. Кроме того, социальные сети открыли перед маркетологами новые возможности для получения опыта аудитории путем исследования онлайнконтента, созданного пользователями, электронных разговоров из уст в уста [10].

Тем не менее, выяснение того, как научные работы по практике и теории цифрового маркетинга развивались с течением времени и вносили свой вклад в литературу, ограничено.

Анализ того, какие журналы, страны и авторы вносят больший вклад в области цифрового маркетинга, также только начинался. Авторы как раз и постарались решить эти вопросы.

Поскольку в этом исследовании будут проанализированы основные научные статьи, опубликованные в базе данных Scopus, оно проложит путь

будущим исследователям, которые намереваются исследовать цифровой маркетинг [11].

Есть три конкурирующих требования, потребности и желания с трех точек зрения на себя, курс / профессию и учреждение.

В этих взглядах есть много пересекающихся и общих элементов. Сильное влияние на использование социальных сетей для обучения оказывает личное использование (отдельным сотрудником) социальных сетей. Оговорки и барьеры на пути использования социальных сетей отдельным сотрудником трудно преодолеть, просто понимая потенциальные преимущества использования социальных сетей студентами.

Эти барьеры и препятствия, скорее всего, будут сильнее и могут быть эффективно преодолены только с помощью четкой институциональной основы поддержки и развития [12].

Таким образом, можно выделить следующие принципы онлайнобучения социального медиа маркетинга:

- 1. Взрослые могут учиться, как дети [13]. Это означает, что учебные материалы по социальному медиа маркетингу были созданы как игра. Взрослые, как и дети, быстрее учатся, когда информация логично представлена небольшими порциями, с нарастающим уровнем сложности, а главное, с картинками или видео [14].
- 2. *Нет домашнего задания*. Предустановленные учебные материалы предназначены для усвоения учащимся в ходе урока, без домашних заданий, на основе многократных повторений [15]. Система позволяет лучше запоминать новые темы, в том числе реализовывать их в реальной жизни.
- 3. Все виды познания. Задействованы три вида познания: зрительная память (картинки и видео), слуховая память (прямое живое общение с учителем) и моторная память (письменные задания с использованием клавиатуры для набора слов в чате). Как правило, люди сильнее в одном типе познания. Использование всех видов познания позволяет быстрее усваивать материал [16].

В дополнение к рассмотрению восприятий учителями готовности, присутствия в интернете, необходимо понимать некоторые другие возможные факторы, связанные с готовностью и онлайн-обучением. Принимая во внимание более широкий набор факторов, можно лучше понять разнородный опыт преподавателей высших учебных заведений и, следовательно, разработать более персонализированную поддержку [17]. Таким образом, в

этом контексте обучение относилось к высшему образованию в университетах, колледжах и аспирантуре [18], но исключало учреждения, предлагающие образование для взрослых, профессиональное образование или профессиональное развитие для учителей без отрыва от работы, и наш онлайн-курс могут быть полезны как для студентов, так и для преподавателей вместе. Это может повысить экономическую и временную эффективность, поскольку теперь можно сэкономить время и деньги, потраченные на поездки на работу и обратно [19].

2. SWOT-анализ онлайн-обучения маркетингу в социальных сетях в Узбекистане

В данном разделе представлен SWOT-анализ преподавания социального медиа маркетинга в Республике Узбекистан в виде онлайн-курса на онлайн-платформе Экономического университета (рис. 1).

S			
	- небольшое количество преподавателей может обучить		
(сильные	большое количество студентов;		
стороны)	- повысится рейтинг Экономического университета;		
	-студенты учатся онлайн в удобное время в свободное		
	от работы и учебы время;		
	-студенты всегда будут иметь доступ к базе данных		
	научных ресурсов через организованную онлайн-		
	платформу;		
	- будет разработана единая система оценки курсов по		
	СММ и будет легче найти специалистов в этой области;		
	- объективность системы оценивания;		
\mathbf{W}	- база данных онлайн-обучения недостаточно развита;		
(Слабые стороны)	-необходимость частого обновления платформы		
•	онлайн-обучения;		
	- не разработана национальная модель онлайн-		
	обучения СММ;		
0	-студенты быстро попадают в поле зрения		
(Возможности)	работодателей и быстро находят работу с		
	сертификатом об окончании данного курса;		
	- обучение будет гибким, учитывающим потребности		
	студентов посредством обратной связи в режиме		
	онлайн;		
	- экономит время и деньги;		
	-в краткосрочной перспективе абитуриенты могут стать		
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

	специалистами в современной области;	специалистами в современной области;		
T	-студенты могут потерять м	отивацию	К	
(Угрозы)	самостоятельной учебе;	самостоятельной учебе;		
	-реклама необходима для того, чтобы п	-реклама необходима для того, чтобы платформа была		
	популярной;	популярной;		
	-много конкурентов для онлайн-курса			

Рисунок 1. SWOT-анализ (сильные стороны, слабые стороны, возможности, угрозы) онлайн-обучения социальному медиа маркетингу в Узбекистане

Заключение

Это исследование отвечает на вопрос, что такое социальный медиа маркетинг, и было проведено, чтобы определить, что такое онлайн-обучение и характеристики онлайн-обучения, которое является важной структурой в обучении маркетингу в социальных сетях. Мы изучили различную литературу по маркетингу в социальных сетях, изучили условия и качество онлайн-обучения. Мы проанализировали спрос на преподавание и изучение маркетинга в социальных сетях. Также был проанализирован SWOT онлайнобучения ПО данному направлению на платформе Экономического университета.

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NEUROELT MAXIMS: THE EFFECT OF TRINITY ASSESSMENT ON CLIL AND NON-CLIL STUDENTS' MOTIVATION AND UNDERSTANDING

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Abstract: The research was conducted at Yeoju Technical Institute in Tashkent. The scope of this research is to investigate the performance of CLIL (English Education faculty) and non-CLIL (Korean Philology and Primary Education) groups students by utilizing one of the neuroELT maxims. Murphy (2014) unveiled 50 maxims and some of them overlap with CLIL methods. 25th maxim (Assess in three ways) was selected to be studied and analyzed in CLIL context and compared with teacher student assessment in non-CLIL groups. The main objective of the study was to reveal how assessment might affect learners' motivation and understanding in CLIL and non-CLIL context. History was selected as the subject to be investigated. All the participants had the same English proficiency level (B2), but the students of the experimental group had history class with the CLIL integration and students in the controlled groups participated in the history classes which were conducted in the form of a lecture with English as a Medium of Instructions. Most activities conducted in the experimental group had mostly self-assessment and peer-to-peer assessment of the tasks in the CLIL history lesson to check the effect of assessment on learner's motivation and understanding, while the control groups mostly were evaluated with teacher-student assessment. The results showed that the trinity of assessment utilized in CLIL groups had huge positive impact on students' motivation and understanding.

Key words: CLIL, neuroELT maxims, neurobiology, cognition, self-assessment, peer assessment, motivation, understanding.

ПРИНЦИПЫ HEBPOELT: ВЛИЯНИЕ ТРОЙНОЙ ОЦЕНКИ НА МОТИВАЦИЮ И ПОНИМАНИЕ СТУДЕНТОВ В CLIL И HE-CLIL КЛАССАХ

Абуова Ж.С., Уралова Н.К.

Аннотация: Цель данного исследования заключается в изучении успеваемости учащихся в CLIL (содержательное и языковое интегрированное обучение) (факультет английского языка) и не-CLIL (корейская филология и начальное образование) ориентированных уроков с использованием одного из принципов нейроЕLT. Мерфи (2014) представил 50 принципов, некоторые из которых совпадают с методами CLIL. 25-й принцип (Оценка тремя способами) был выбран для изучения и анализа в CLIL уроках и для сравнения с оценкой учеников на занятиях без CLIL. Основная цель исследования заключалась в том, чтобы выявить, как оценивание может

повлиять на мотивацию и понимание учащихся в контексте CLIL и не-CLIL. В качестве предмета исследования была выбрана история. Все участники имели одинаковый уровень владения английским языком (В2), но у студентов экспериментальной группы был урок истории с интеграцией CLIL, а студенты контрольной группы участвовали на уроках истории, которые проводились форме лекции на английском языке. Большинство мероприятий, проведенных в экспериментальной группе, в основном включали оценку самого себя и оценку своего однокурсника, чтобы проверить влияние оценки на мотивацию и понимание учащегося, в то время как в контрольных группах в основном оценка проводилась только учителем. Результаты показали, что тройное оценивание, используемое в группах CLIL, оказало огромное положительное влияние на мотивацию и понимание учащихся.

Ключевые слова: CLIL (содержательное и языковое интегрированное обучение), принципы нейроЕLT, нейробиология, познание, тройное оценивание, мотивация, понимание.

1. Introduction

Content and Language Integrated Learning (CLIL) might be defined as an increasingly popular pedagogical approach in many countries worldwide that has been evolving in response to the need for the development of plurilingual education in schools and higher institutions. In the light of this, this "dual-focused approach in which additional language is used for the learning and teaching content and language" (Coyle, Hood & Marsh, 2010) is gradually gaining popularity in tertiary institution in Uzbekistan. Since 2020, after CLIL faculty was established in Yeoju Technical Institute in Tashkent, extensive research has been conducted on the correlation between CLIL and Second Language Acquisition (SLA). The research revealed several advantages of CLIL to English Learning process. This approach is quite flexible and can accommodate various teaching techniques (Uemura, 2013) and fits well with powerful language acquisition theories. In this respect, Halliday's model of learning (1993) consists of three main processes, which is the core of CLIL (learning language, learning through language, learning about language).

The implementation of CLIL leads to applying this triadic theory and increases the efficiency of language learning. According to Urmeneta (2012) CLIL provides the assistance "to comprehend, produce and negotiate academic messages", promoting truly integrated approach which is crucial in higher education. According to language learning theories (Lightbown & Spada 2010, Swain 2000) an L2 might be acquired more effectively while having the similar conditions of acquiring an L1, which are the followings:

- having abundant language input
- giving language learners more opportunities to be engaged in meaningful exchanges
- providing learners support and scaffolding in comprehending others and making themselves understood (mutual understanding)
- focusing of instruction on the meaning rather on form

These features can be found in CLIL, turning the approach into effective and productive language acquisition process. Mehista, Marsh & Frigols (2008) listed five main principles of CLIL, which are "multiple focus, authenticity, safe and enriching learning environment, activate learning and scaffolding". Swain (2000) highlights that the length of time students are exposed to L2 is crucial in language learning success. CLIL increases contact time with L2, offering more chance for students to enhance their language skills. In terms of quality of interaction in L2, CLIL classes offer natural settings, encouraging students focusing on meaning and prioritizing how successful communicative exchange is. However, this does not necessary mean that CLIL eliminate form-focused instructed, but embeds the focus to form while teaching a content in meaningful ways (Coyle, 2005). Alongside with this, CLIL promotes learner-centeredness, activates learning methods, encouraging collaboration of learners, incorporating group and pair working. Active collaborative work is necessary to build appropriate and enriched learning environment. To foster CLIL implementation, Coyle (1999) suggested the 4C framework which consists of content (subject), communication (language), cognition (learning and thinking) and culture. The framework shows the interrelationship between content and language, integrating content and cognition, communication (language) and intercultural understanding (Coyle, 2007). Even though CLIL varies according to the purpose Ikeda (2011), being addressed as having content learning objectives and language learning objectives, there is always integration and interconnection, "joint role" (Marsh, 2002), which foster productivity of CLIL classes.

While Dalton-Puffer (2015) defines CLIL as an approach that helps L2 learners to improve their vocabulary, writing accuracy, grammar, fluency and communication strategies, the research by Lasagabaster (2011) showed that CLIL enhances learner motivation. According to Coyle (2008) implementing CLIL challenges learners to take "high quality learning approach", provides more contexts to use L2 and increases the degree of motivation to learn a foreign language. Another powerful impact of CLIL is an increased motivation in both teachers and learners. CLIL maintains a natural use of a language and this in turn, boosts learners' motivation to learn languages. When learners are interested in a topic, they "will be motivated to acquire a language to communicate" (Darn, 2006).

Recently years, the focus of language teaching altered from "how language works to how language acquisition takes place in the brain" (Kelly & Sandy, 2008). Educational neuroscience is a cognitive neuroscience that "concerns understanding of mind, brain and education" (Campbell, 2011). All these investigations and findings shed light on another interesting overlap between CLIL and "neuroELT maxims" (Murphy, 2014). Murphy (2014) introduced the correlation between neuroscience and ELT. 50 neuroELT maxims are coined and have been investigated from neurobiological perspective. NeuroELT is explained by Helgesen (2015) as "the intersection of mind, brain, education" and English Language Teaching with "a special interest in teaching and learning". He also highlights while the focus of neurolinguistics is theory and less classroom applications, neuroELT requires theory to be more "evidence-based" and classroom applications. Murphy (2015) proposes 5 tips for teachers that are based on neuroscience:

- To captivate learners' attention by providing materials that are intrinsically motivating
- To conduct applicable and meaningful lessons
- To provide emotional attachment to activate neurons
- To give learners a chance to make choices
- To involve students into more prediction activities

This research focuses on maxim 25 which is "Assess in three ways" or "Trinity of assessment", which are self-assessment, peer-to-peer assessment and teacher-student assessment. The importance of self-assessment has been enhanced by Boud & Falchikov (1989) and now it is considered to be an effective way of self-monitoring and judging their progress. Self-monitoring has a huge positive impact on some affective elements of language learners which are the enhancement of learners' confidence, motivation, and self-efficacy (Sambell & Dowel, 1997). Joseph (2005) highlights that through self-evaluation learners improve self-efficacy and this subsequently leads to increase motivational intensity. Murphy (2014) postulates that while self-assessing learners use their metacognitive awareness actively and this promotes to regulate and reflect one's own cognitive process. Baker (2005) defines regulation of cognition as "planning further moves and actions, checking one's outcomes, evaluate how actions are effective, using strategies, testing and revising learner techniques". As learners feel that they can monitor, evaluate their efforts and learning goals, they will develop learner autonomy and intrinsic motivation for learning.

The more reflection on one's own work brings about "high standards of outcomes, responsibility for learning and developing comprehension of problem-solving" (Dochy, Segers, & Sluijsmans, 1999). Similarly, peer-assessment is also found to exert a positive impact on learners' affective elements since it helps to reduce stress and anxiety, increases confidence, and enhances intrinsic motivation (Falchikov,

2007). Falchikov (1995) defined peer-assessment as "the process through which group of individuals rate their peers". Peer-assessment benefits learners in various aspects such as gaining elaborate knowledge of peers' work, developing learner independence, diplomatic and problem-solving skills, as well as transfer of learning (Falchikov, 2007). From neurobiological perspective, humans are innately inclined to socialize and socialization and interaction generates positive emotions. As learners interact, share their knowledge and experience, they raise their awareness of recognizing better performances, they learn how to analyze and gauge errors. This enables students to teach and learn from each other, achieving metacognitive gains. Somervell (1993) highlights that peer-assessment is not only "grading but skill developing and fostering learning process".

This research scrutinizes the effects of traditional teacher-student assessment and neuroELT maxim trinity of assessment on CLIL and non-CLIL groups' affective (motivation) and cognitive (understanding) elements.

2.Method 1.1. Research site and participants

This was a pilot study conducted at a private institute Yeoju in Tashkent, with 213 first-year major students participating (167 female students and 46 male students (Table 1)). Educational faculties have 3 departments, and the number of students taken part in research was large. The figure 1 depicts the result of this study by the department. The course that was chosen for the research was a history class which is obligatory for the first course students. All groups that were chosen to the study were English groups as to study in the English groups they must have IELTS 5.5 or any equivalent certificate that proves their language proficiency. The subjects of the experimental groups were having history class with the CLIL integration and the subjects in the controlled groups participated in the history classes which were conducted in the form of lecture with English as a Medium of Instructions.

Table 1

The number of female and male students according to the faculty				
Faculty	Female students	Male students		
English education	98	23		
Korean philology	36	8		
Primary education	37	9		

Experimental groups (EG) and controlled group (CG)

The groups which were chosen for the research were taught in English the major part was chosen from the English Education faculty (121 students) and the rest part was chosen from Korean and Primary education faculty (Table 2).

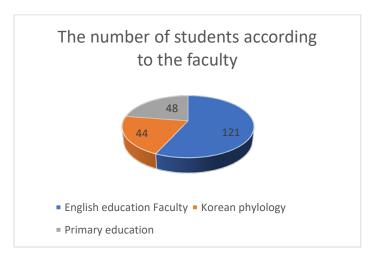


Table 2

The basic aim of the research is to find out how assessment may positively affect the learner motivation and understanding. As a result, most activities in the experimental group had mostly peer-to-peer assessment as well as self-assessments of the tasks in the CLIL history lesson to check the effect of assessment on learner's motivation and understanding neuroELT maxims. On the contrary, the control groups mostly were evaluated with teacher-student assessment only while lessons were conducted with the combination of lecture and CLT methods. English education faculty was set as an experimental group (n=121), while Korean and Primary Education Faculty students were considered as control group (n=92).

1.1. Measurement and procedures

Primarily, in order to check the language proficiency level of all participants it was decided to use IELTS proficiency test. It was decided conduct to prevent lapses in the research data, because a significant difference in the English level might lead to the incorrect data collection. The effect of self-assessment and peer-assessment in CLIL classes on motivation and understanding was measured with the help of survey and content comprehension test. The motivation and understanding were measured with pre-test questionnaire and post-test questionnaire as well as final result was compared between controlled and experimental groups.

1.1.1. Proficiency test

At the beginning of the major history course students passed proficiency test that was taken from the Cambridge IELTS 12. However, they were checked only for the receptive skills such as listening and reading as most comprehension of the subjects will be taken with the help of receptive skills. Both tests were conducted in the classroom and checked. The results of the students were presented in the form of controlled group and experimental group.

1.1.2. Pre-test questionnaire for the measurement of motivation

The initial objective of the study how various forms of assessment might positively motivate students and increase their desire to study was presented with the help of pre-test questionnaire in order to check primary position of emotional position of the students. Murphy states, that consideration of self-assessment, peer assessment as well as teacher assessment is important and might lead to considerable enhancement of the student motivation and wish to gain the knowledge. The subjects of the study had never experienced the activities that involved peer to peer assessment as well as self-assessment. Both controlled groups and experimental groups tried lecture classes as well as CLT methodology, however, none of the groups had any comprehension of the CLIL classroom.

The pre-test questionnaire contains 10 items, each question relates to learner motivation and understanding. It was decided to make a questionnaire in present simple to make them answer from the perspective of the person who has never experienced it before. In case of giving questions in the past tense it might lead to confusion and misunderstanding of the task.

Question items:

The influence on understanding

- 1. By looking back at my learning process in self-assessment, I can clearly reflect on my total comprehension of the content.
- 2. By discussing in peer with my classmate my learning is enhanced as I get additional input from my classmate
- 3. It is better to check the understanding of assessment in pairs and groups then doing it alone.
- 4. Checking works of other students might positively affect the overall comprehension of the content.
- 5. Being assessed by teacher gives me satisfaction of full explanation of the content.

The influence on motivation

- 6. I am more conscientious of my managing my learning pace.
- 7. As I can see my learning items, I am more motivated to cover something I do not fully understand.
- 8. I want to check my understanding alone, before checking it with my pair or group.
- 9. It is meaningful to participate in discussion as I am motivated to express my thoughts to my classmate.
- 10.Because I give my assessment after self- assessment and peer- assessment I feel comfortable and motivated.

All questionnaire items were marked with 5 level of agreement such as: strongly agree, agree, neutral, disagree, strongly disagree.

The questionnaire was given at the beginning of the History class and it took 15 minutes to finish the questionnaire for all students. The questionnaire was conducted with the help of google survey due to the factor that it is easy to use and time saving. Prior to the research I explained the research for students and got oral consent form from the subjects. All measures were held to make subjects feel responsibility for their response.

1.1.3. Post-test questionnaire

The post-test questionnaire was administered during the last lesson of the term, with in the lesson time at the end of the class in 15 minutes. The post-test questionnaire also contains 10 questions which are measuring both understanding and motivation. As controlling groups did not experience self- assessment and peer assessment it is important to state that aim of the question was to find whether there was a change of the learner attitude towards assessment concerning understanding and motivation and its affect to the CLIL classroom. In doing so, the research tried to find out how well neuroELT activities in the CLIL lesson enhance learner motivation and understanding.

1.1.4. Final results analysis

At the end of the term the final results of the students in the controlled groups and experimental groups were compared in order to check overall achievement of the students and how all the neuroELT maxims as well as CLIL classes might positively affect to the testing result of the students in the higher education. Final exam was focused on the oral exam to check objectively not learned details but also understanding of the students towards the given question. Each subject was given 3 questions which were related to the various content of the History lesson.

2.Results

This part will be giving detailed description of the results that were gained during the research. The results of the proficiency test, pre, post questionnaires and final will be shown in the form of table and described in detail. The most part of the data was based on the quantitate research which will be presented below.

3.1. Proficiency test results

As it was stated above, the test for proficiency was IELTS. However, it was decided to check only receptive skills such as reading and listening. The results presented that the difference between controlled group and experimental group was not so large. Controlled groups students were learning subjects in English as well as experimental group. According to the result, English education faculty students had slightly higher results concerning English level with average 6.3, while students of primary education and Korean philology had slightly lower results with 5.9 and 6.1 points on average respectively.

Proficiency test results		
Faculty	Average score	
English education	6.3	
Primary education	5.9	
Korean philology	6.1	

Table 3

The average score was calculated by adding all scores according to the faculty and dividing in to the number of students who participated in the test. All Subjects that were included in to the research had the test and all of them were counted.

3.2. Pre-test results and post test results for checking understanding

Looking at the pre-test results of controlled group and experimental group it is possible to notice that most students responded similar to the given questions (Tables 4 and 5)

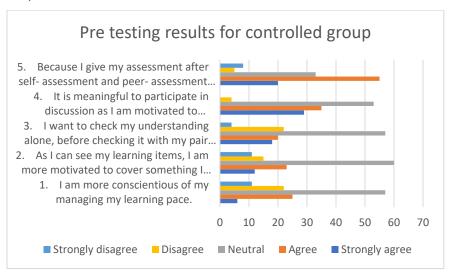


Table 4

Comparing two tables it is possible to notice that both controlled group and experimental group had the same attitude towards the statements and most students were neutral for the assessment as they were not aware of the assessment types. As a result, it could be taken into the consideration that the results of the post test will show the real result of the comprehension.

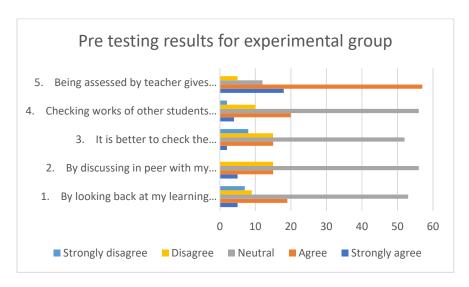


Table 5

Moving to the results of the post period, it can be seen that controlled group had almost the same result and attitude towards the matter. However, it is possible to notice that experimental group changed its position and showed that self-assessment and peer assessment positively affected on the topic comprehension. The post results of the controlled group and experimental group are presented in the tables 6 and 7.

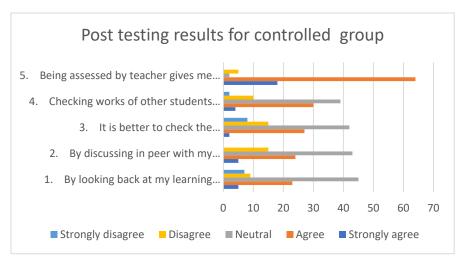


Table 6

Comparing pre test and post test results of the controlled group it might be seen that most students became less neutral towards the questions. However, they are not presenting a high rate of believe towards the assessment.

The second table shows that majority of subjects believe that assessment provided by peers and student himself might positively affect towards the comprehension of the matter (Table 7)

Looking at the data it is possible to notice that most students are leaning towards the fact that various forms of assessment considerably improve their level of comprehension.

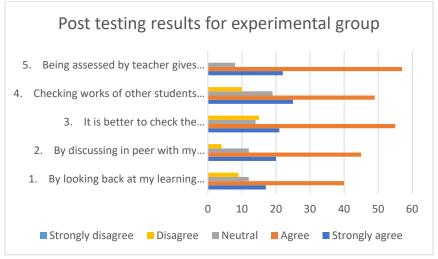


Table 7

3.3. Pre and post test analysis of the motivation

The level of motivation of the controlled group and experimental group also did not have a lot of differences most students were not sure of the topic and did not want to give certain respond to the question. As a result, it is possible to notice a lot of similarities in the bar charts. Table 8 refers to the controlled group and table 9 is showing results of the experimental groups.

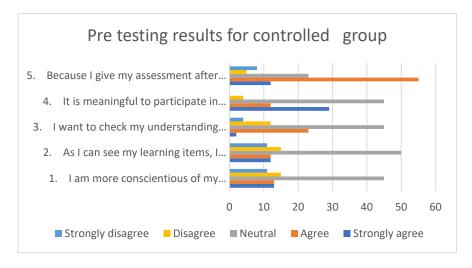


Table 8

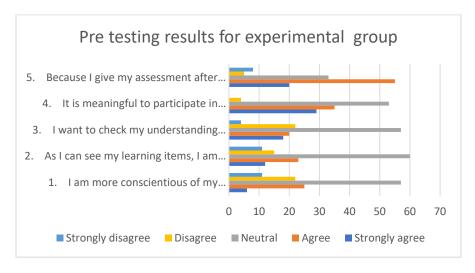


Table 9

While analyzing results of the post-tests results it was found that data of controlled group and experimental group was different. If controlled group did not have certain response after the lessons, because they were not experiencing them. Experimental group with significantly large number of students agreed that self-assessment and peer assessment can considerably improve motivation for learning and enhance desire to study which positively affects to the lesson cognition. The results of the post tests were presented with table 10 for controlled group and with table 11 for experimental groups.

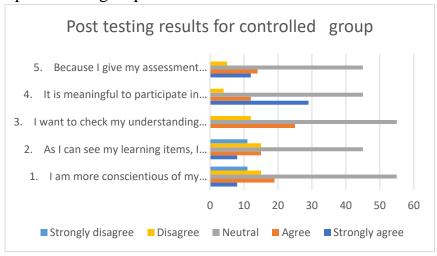


Table 10

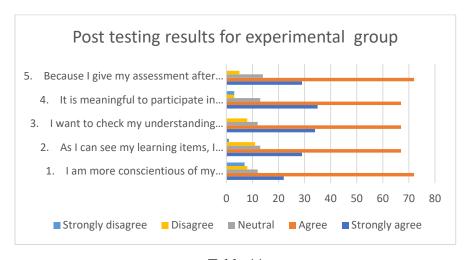


Table 11

3.4. Final results analyses

The results of the final were surprisingly positive. The maximum score of the final was taken from 50 %. Table below will present that majority of students in the English education department who were in the experimental group gained much higher average score in the History CLIL class after being assessed not only by teacher but also by peers and themselves. The results of the final are presented in the form of average score according to the faculty (Table 12).

Faculty	Average score
English education	44%
Primary education	38%
Korean Philology	39%

4. Discussion

4.1 The effect of self-assessment and peer assessment on understanding

The research was focusing on the effect of self-assessment and peer assessment on the learners from the perspective of motivation and understanding in History CLIL classes and History classes in the higher educational context.

The results presented that self-assessment and peer assessment have positive effects on understanding with average 30%. It can be seen while comparing the results of the pretest and the post test of the experimental group. It is important to note that understanding was not affected by the language level of the students as subjects had almost the same level of English that was equal to the B2 level.

Both experimental group and controlling group showed that teacher assessment is important for learning context and results in both cases showed high

scores towards the teacher assessment and important effects to the understanding. Students found it important and necessary for the comprehension of the content.

4.2 The effect of self-assessment and peer assessment on motivation

The next important moment that was studying is motivation. CLIL studies proved that while having CLIL related lessons students become more motivated and interested. There a lot of factors that affect to the notion, and assessment plays major role. While studying in CLIL class students go through the step by step assessing process. First, they are analyzing the task alone which give them inner understanding, after discussing it with peers and getting feedback from teachers. These steps increase motivation and make students more confident of the material that was covered in the process. Additionally, students are sure of getting higher result as they were getting more feedback rather than only form the teacher.

Looking at the pretest and the post test of the experimental group it is possible to see the rise of positive statement towards motivation. Looking at the data it is visible that 34% more students believed that self-assessment and peer assessment make them more motivated in the classroom.

4.3. The effect of assessment and CLIL classes on the comprehension and understanding of the content

One more moment that was checked for the total comprehension of the content was the results of the final. The results present that English Education had higher results than Korean philology and Primary education faculties. The results of final were higher for 5% from Korean philology students and 6% higher than Primary Education students. Looking at the results it is possible to see that CLIL methods work better for the higher education, especially if it is seasoned with various forms of assessment.

5. Conclusion

This research investigated learners' motivation and understanding using one of the neuroELT maxims of CLIL and non-CLIL groups. Trinity assessment utilized in CLIL context and the results of tests revealed that CLIL students showed much higher performance. Regarding understanding, CLIL students performed better in tests and gained more comprehension of the content due to the variety of assessment. In terms of motivation, utilizing self and peer assessment increased motivation intensity of CLIL students. Getting feedback from their peers, students were given a chance to become more confident and believe in their better performance, and this fostered students' motivation.

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KREDIT TIZIMI ASOSIDA TA'LIM JARAYONLARINI REJALASHTIRISHNING AFZALLIKLARI VA MUAMMOLI JIHATLARI

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Annotatsiya: Kredit-modul tizimi dunyoning ilgʻor mamlakatlari oliy ta'lim tizimida keng qoʻllanilayotgan tizimdir. Ushbu ta'lim tizimining oʻziga xos xususiyatlaridan biri oʻquv jarayonida asosiy e'tibor talabalarning mustaqil ishlashiga qaratilganligidir. Ushbu maqolada kredit-modul tizimi va uning Oʻzbekiston ta'lim tizimida joriy etilishi, ahamiyati, dunyo mamlakatlarining ta'lim tizimida kredit-modul tizimining oʻziga xosxususiyatlari, imkoniyatlari va

afzalliklari haqidagi fikrlar bayon etilgan.

Kalit soʻzlar: kredit, modul, kredit-modul tizimi, kredit-soat, Bolonya shartnomasi, Bolonya jarayoni, ECTS tizimi, kredit-modul tizimi imkoniyati, kredit-modul tizimi ahamiyati.

ADVANTAGES AND CHALLENGES OF EDUCATIONAL PROCESS PLANNING ON THE BASIS OF CREDIT SYSTEM

Sapayev M., Qodirov F.M., Abdullayeva S.M.

Abstract: The credit-module system is a widely used system in the higher education system of the developed countries of the world. One of the peculiarities of this education system is that the main focus in the learning process is on the independent work of students. This article describes the credit-module system and its introduction in the education system of Uzbekistan, its importance, the peculiarities, opportunities and advantages of the credit-module system in the education system of the world.

Keywords: credit, module, credit-module system, credit-hour, Bologna agreement, Bologna process, ECTS system, credit-module system opportunity, credit-module system importance.

Kirish

Hozirgi davrda mamlakatimizda turli sohalarda, jumladan oliy ta'lim tizimida ham, mamlakatning kelajagi uchun mustahkam poydevor qurish va rivojlangan mamlakatlar darajasiga erishish uchun koʻplab islohotlar va ishlar amalga oshirilmoqda. Kelajak avlodning bilimli va barkamol boʻlib yetishishi ta'minlash maqsadida mamlakat ta'lim tizimiga yangi ta'lim texnologiyalari, xorij tajribalari joriy etilmoqda. Jumladan, 1999 yil iyun oyida Italiyaning Bolonya shahrida dunyoning 29 ta mamlakati oʻrtasida imzolangan, ayni paytda dunyoning 48 ta mamlakati ishtirokchisiga aylangan Bolonya deklaratsiyasiga Oʻzbekiston Respublikasining qoʻshilishi va ta'lim tizimiga kredit-modul tizimini joriy etish borasida ishlarning boshlab yuborilishi mamlakat oliy ta'lim tizimida zamonaviy oʻzgarishlar davrini boshlab berdi.

Oʻzbekiston Respublikasi Prezidentining 2017 yil 7 fevraldagi "Oʻzbekiston Respublikasini yanada rivojlantirish boʻyicha Harakatlar strategiyasi toʻgʻrisida"gi PF-4947-sonli Farmoniga koʻra 2017-2021 yillarda oliy va oliy ta'limdan keyingi ta'lim tizimida Oʻzbekistonning Bolonya deklaratsiyasiga qoʻshilishiga shartsharoitlar yaratildi va oliy ta'lim muassasalarida oʻquv jarayoniga kredit-modul tizimi joriy etildi.

O'zbekiston Respublikasining Bolonya jarayoniga qo'shilishining zarurati

zamon talabidan kelib chiqib, bir qancha ijtimoiy-siyosiy faktorlarga va ta'lim sohasida roʻy berayotgan ob'ektiv voqeliklar bilan bogʻliqdir. Oʻzbekiston Respublikasi suveren mamlakat sifatida jahon hamjamiyatida oʻz oʻrnini mustahkamlab bormoqda, demak u hozirgi xalqaro taraqqiyot tendensiyalaridan chetda tura olmaydi. Oʻzbekiston Respublikasining Bolonya jarayoni ta'lim tizimiga qoʻshilishi unga dunyoning koʻplab mamlakatlari bilan oliy ta'lim sohasidagi aloqalarni yanada kengaytirishni ta'minlaydi va mamlakatimiz ta'lim tizimining xalqaro miqyosidagi reytingini oshishiga olib keladi.

Bolonya jarayoni - bu Yevropa mamlakatlari orasida oliy ta'limni uyg'unlashtirish jarayonidir. U tushunish oson bo'lgan va o'xshash oliy ta'lim darajalar tizimini yaratishni, ta'limda kredit-modul tizimiga o'tishni, ta'lim sifatini ta'minlashda erkin akademik harakatlanishni va Yevropadagi ta'lim hamkorligini o'z ichiga oladi. Qisqa qilib aytganda, bu Yevropa mamlakatlarining oliy ta'lim tizimlarini uyg'unlashtirish, har bir kishi uchun teng ravishda ta'limni ta'minlash, intellektual, madaniy, ijtimoiy, ilmiy va texnologik salohiyatni shakllantirish va mustahkamlash, ta'lim sifatini takomillashtirish jarayonidir [1].

Oʻzbekiston Respublikasi Prezidentining 2019 yil 8 oktabrdagi PF5847-son Farmoni bilan tasdiqlangan "Oʻzbekiston Respublikasi Oliytta'lim tizimini 2030 yilgacha rivojlantirish konsepsiyasi"da oliy ta'limtjarayonlariga raqamli texnologiyalar va zamonaviy oʻqitish usullarni joriy etish, yoshlarni ilmiy faoliyatga keng jalb etish, korrupsiyaga qarshi kurashish, muhandislik-texnik ta'lim yoʻnalishlarida tahsil olayotgan talabalar ulushini oshirish, kredit-modul tizimini joriy etish, oʻquv rejalarida amaliy koʻnikmalarni oshirishga qaratilgan mutaxassislik fanlari boʻyicha amaliy mashgʻulotlar ulushini oshirish boʻyicha aniq vazifalar belgilab berilgan.

Oʻzbekiston Respublikasi Prezidenti Sh.M. Mirziyoevning 2020 yil 24 yanvardagi Oliy Majlisga yoʻllagan murojaatnomasida 2020 yilga "Ilm, ma'rifat va raqamli iqtisodiyotni rivojlantirish yili" deb nom berishning taklif etilishi, maktab bitiruvchilarini oliy ta'lim bilan qamrab olish darajasini bosqichma-bosqich oshirib borish, ta'lim yoʻnalishlari va oʻqitiladigan fanlarni qayta koʻrib chiqish, mutaxassislikka aloqasi boʻlmagan fanlar sonini 2 barobar qisqartirish, oliy ta'limda oʻquv jarayoni kredit-modul tizimiga oʻtkazish, qator oliy ta'lim muassasalarini oʻzini oʻzi moliyaviy ta'minlashga oʻtkazish, ta'lim sohasini toʻliq raqamlashtirish, davlat-hususiy sheriklik mexanizmlarini ta'lim sohasiga ham keng tatbiq etish masalalari shu kunning dolzarb masalalari ekanligi ta'kidlab oʻtilgan.

Ushbu murojaatnomada birinchi oʻringa xalqning bilim darajasini oshirish masalasi qoʻyilgan, bu esa millatning raqobatbardoshligini belgilovchi omil hisoblanadi. Shu sababli, tabiiyki, ushbu hujjatda zamonaviy talablar va jahon standartlariga javob beradigan milliy ta'lim tizimini yaratish muammosining elementlari ham oʻz aksini topgan.

Muammoning qo'yilishi

"Kredit-modul tizimida oʻqitishning qanday afzalligi va biz amalda foydalanib kelayotgan ta'lim tizimidan qanday farqi va ustunliklari bor?". Ushbu savollarga javob berish uchun dastlab kredit-modul tizimi haqida, kredit-modul tizimi va uning Oʻzbekiston ta'lim tizimida joriy etilishining ahamiyati, dunyo mamlakatlarining ta'lim tizimida kredit-modul tizimining oʻziga xos xususiyatlari, imkoniyatlari va afzalliklari borasida izlanishlar olib borish muhim hisoblanadi.

Oʻzbekistonda kredit ta'lim tizimiga asoslangan milliy modelni ishlab chiqishda, Yevropa ECTS krediti va Amerika kredit soatlari tizimlarining yutuqlarini inobatga olgan holda yuqori ta'lim sifatini va dunyo ta'lim jarayonlariga integratsiyalashish uchun ishonchli asosni tanlash maqsadga muvofiqdir [2]. ECTS kredit tizimi koʻp millatli Yevropa an'analarini inobatga olgan holda turli ta'lim tizimlarini yaqinlashtiradi.

Kredit-modul tizimida ahamiyat beriladigan asosiy masalalar sifatida quyidagilarni koʻrsatish mumkin [3]:

- talabalarning mustaqil ishlashini ta'minlash;
- talabalar bilimini reyting asosida baholash;
- oʻqitishning modulli texnologiyasini ishlab chiqish va takomillashtirish;
- talabalarning oʻz ustida mustaqil ishlashini ta'minlash uchun fanning metodik ta'minotini yanada takomillashtirish.

Kredit-modul tizimining asosiy vazifalari sifatida quyidagilarni e'tirof etish mumkin:

- oʻquv jarayonini modul asosida tashkil qilish;
- bitta fan va kurs kesimida kreditning qiymatini aniqlash;
- talabalar bilimini reyting asosida aniqlash va baholash;
- talabalarning oʻz shaxsiy oʻquv rejalarini individual tarzda shakllantirishga imkoniyat yaratish;
 - ta'lim jarayonida mustaqil ta'lim olishning ulushini oshirish;
- ta'lim dasturlarining qulayligi va mehnat bozorida mutaxassisga qo'yiladigan talabdan kelib chiqib o'zgarishlarni amalga oshirish;
- talabalarning fanlar va professor-oʻqituvchilarni tanlashi uchun imkoniyatlar yaratish.

Kredit-modul tizimining afzallik va muammoli jihatlari

Kredit-modul tizimiga oʻtishda bir qator muammoli jihatlarga e'tiborimizni qaratishimiz va bu tizimning afzallik jihatlariga urgʻu berish maqsadga muvofiqdir.

Ma'lumki, talabaning umumiy yuklamasi auditoriya va mustaqil ta'lim

yuklamalaridan iborat. Amaldagi ta'lim tizimida auditoriya yuklamalariga katta e'tibor qaratilib kelinmoqda, lekin mustaqil ish turlari hali ommalashmagan. Kredit tizimida eng avvalo talabaning mustaqil ishiga jiddiy e'tibor qaratiladi.

Kredit bu baho emas, balki ish hajmi hisoblanadi. Masalan, talaba 6 kreditlik fanni oʻzlashtirgan boʻlsa, u 6 kredit hajmidagi ishni bajargan hisoblanadi, ya'ni u ushbu fanning ma'ruzalarida, amaliy va laboratoriya mashgʻulotlarida qatnashgan, mustaqil ish topshiriqlarini bajargan hisoblanadi. Demak, bu fanni oʻzlashtirgan talaba uni qanday bahoga oʻzlashtirganidan qat'iy nazar u 6 kreditni qoʻlga kiritadi.

Kredit-modul tizimining mazmun-mohiyatini ochib berishda uni faqat "kredit" va "modul" atamalari orqali izohlash yetarli boʻlmaydi. Bu atamalar uni ixcham nomlash uchun qoʻllanilgan. Kredit-modul tizimining mohiyatini boshqacha qoʻyidagi usulda ochib berish maqsadga muvofiqdir. Ya'ni, asosiy tamoyillar, kredit-modul tizimining amaldagi ta'lim tizimidan farq qiluvchi jihatlari qoʻyidagicha.

Avval ta'kidlab o'tilganidek, kredit-modul tizimining asosiy tamoyillari va elementlari qisman O'zbekiston Respublikasi oliy ta'lim tizimiga tatbiq qilingan. Bu yerda kredit-modul tizimining faqat biz uchun yangi bo'lgan va amaldagi ta'lim tizimida mavjud bo'lmagan quyidagi muammoli jihati va afzalliklarini va uni amalga oshirish bo'yicha takliflarni keltirib o'tamiz:

1) Oliy ta'limning samaradorligi. Amaldagi ta'lim tizimida talabalar 1-kursdan boshlab yoʻnalishlar va ular ichida tarmoqlar boʻyicha ajratilib ixtisoslik fanlarini oʻqishni boshlashadi. Ya'ni, biz talabani hali abiturientlik paytidayoq tanlovdan mahrum qilib ixtisoslikka biriktirib qoʻyamiz. Kredit-modul tizimida esa eng avvalo talabaga tanlov imkoni beriladi. Tanlov fanlari semestrdan semestrga oshib boradi.

Ilgʻor xorij tajribasi shuni koʻrsatadiki, bakalavriatni ikkita bosqichga ajratish orqali, 1-2 kurslarda tayanch fanlarni, 3-4 kurslarda esa tanlov asosida ixtisoslik fanlarini oʻqitish mumkin. Demak, endilikda kadrlarga boʻlgan ehtiyojni qondirish uchun 4 yil emas, 2 yil yetarli boʻladi. Bu esa oliy ta'limning ish unumini, samaradorligini 2 barobar oshiradi.

2) "Talaba-oʻqituvchi" nisbati. Hozirgi kunda Oʻzbekiston oliy ta'lim tizimida maxsus fanlarni past kurslardan boshlab rejalashtirish, oʻquv rejalardagi takrorlanadigan fanlarni har xil mutaxassisliklar boʻyicha alohida oʻqitish, auditoriya soatlari hajmini oshirish kabi holatlar mavjud. Bunday jarayonlar oʻquv yuklamalarining keskin oshishiga sabab boʻladi.

Biroq, biz bilamizki oliy oʻquv yurtida bitta oʻqituvchiga toʻgʻri keladigan yuklama hajmi oliy oʻquv yurti boʻyicha umumiy oʻquv yuklamasi hajmini talabalar soni asosida hisoblangan oʻqituvchilar soniga boʻlish orqali aniqlanadi. Ya'ni, oʻqituvchilar shtati oʻquv yuklamalari asosida belgilanmaydi, balki talaba-

oʻqituvchi nisbati orqali belgilanadi. Oliy oʻquv yurti boʻyicha umumiy oʻqituvchilar soni aniqlangandan soʻng, ushbu asosda kafedralar shtatini shakllantiriladi, bunda esa kafedra oʻquv yuklamalari hajmiga asoslaniladi.

Kredit-modul tizimida talaba-oʻqituvchi nisbati 16:1 va undan ham yuqori boʻlishi koʻzda tutiladi. Bunga auditoriya yuklamalarini kamaytirish, talabaning mustaqil ishi hajmini oshirish, oʻquv rejalarni unifikatsiyalash, darslarni katta auditoriyada tashkil qilish orqali erishish mumkin.

3) Talabaning mustaqil ish turlari. Amaldagi ta'lim tizimida asosan auditoriyadagi darslarga koʻproq e'tibor beriladi, talabaning mustaqil ishiga esa jiddiy e'tibor qaratilmaydi, chunki bu faoliyat turi chuqur oʻrganilmagan.

Kredit-modul tizimida esa fan moduli tarkibidagi "O'qituvchi rahbarligidagi talabaning mustaqil ishi" va o'qituvchiga bog'liq bo'lmagan "Mustaqil ta'lim" muhim ahamiyat kasb etadi. Oʻqituvchi rahbarligidagi talabaning mustaqil ishiga: keyslar, topshiriglar, intervyu, krossvord, viktorina, esse, dayjest, taqdimot, hisob ishi, hisob-chizma ishi, kurs loyihasi, kurs ishi, ilmiy izlanishlar, fan to'garaklarida qatnashish va h.k.larni misol qilib keltirish mumkin. Bunday faoliyat turlariga rahbarlik qilish uchun alohida o'quv yuklamalari joriy etilishi maqsadga muvofiq. Mustagil ta'limga esa vodkastlar, o'rgatuvchi testlar, virtual trenajyorlar, FAQ, forumlarni misol qilib keltirish mumkin. O'qituvchi rahbarligidagi talabaning mustaqil ishi va mustaqil ta'lim turlari ro'yxatini, glossariylarni, ularni qo'llash bo'yicha uslubiy qo'llanmalarni zarur darajada shakllantirishimiz mumkin, lekin eng asosiy masala – har bir fan bo'yicha o'ziga xos o'qituvchi rahbarligidagi talabaning mustaqil ishi va mustaqil ta'lim turlarini ishlab chiqishdir. Ayniqsa, ushbu mustaqil ish turlarini masofaviy ta'lim platformalarida shakllantirish shu kunning eng dolzarb muammolaridan biridir. Bu jarayonlarni ilg'or pedagoglarning tajribalarini ommalashtirish orqali jadallashtirish mumkin.

- 4) Oʻquv rejalarining mosligi. Hozirgi kunda Oʻzbekiston oliy ta'lim tizimida bir xil yoʻnalishdagi oʻquv rejalarning turdosh OTMlarda oʻzaro farq qilishini kuzatish mumkin. Kredit-modul tizimi joriy qilinishi bilan esa oʻquv rejalar Bolonya jarayoni ishtirokchi davlatlaridagi oʻquv rejalarga toʻliq mos boʻladi va diplomlarning oʻzaro tan olinishiga sharoit yaratiladi. Buning uchun birinchi nav-batda oʻquv rejalarimizning xorijiy oʻquv rejalarga mosligini tahlil qilishimiz zarur.
- 5) Ta'lim natijalari. Kredit-modul tizimida ta'lim mazmuni "ta'lim natijalari" asosida rejalashtiriladi. Yanada aniqroq aytadigan bo'lsak, talabalarga o'qitiladigan fanlar va ularning mazmuni kelgusidagi kasbiy faoliyat turi uchun qanchalik zarurligidan kelib chiqib shakllantiriladi. Ochig'i, hozirgi kunda biz bu borada maqtana olmaymiz, chunki o'quv rejalariga ob'ektiv va sub'ektiv sabablarga ko'ra har xil fanlar kirib qolgan. Bu muammoni hozirgi kunda ikki xil usulda yechish mumkin.

Birinchidan – bakalavriat va magistratura ta'lim dasturlari boʻyicha kompetensiyalar jadvalini shakllantirish, professiogrammalarni tuzish zarur. Bu juda aniq, lekin katta hajmdagi ish hisoblanadi.

Ikkinchidan – oʻquv rejalarini xorijiy tahlil qilish zarur. Bunda yetakchi xorijiy oliy oʻquv yurtlarining oʻquv rejalari va sillabuslari mazmuniga moʻljal olinadigan boʻlsa kamroq xatoga yoʻl qoʻyiladi va bu ishni mutaxassislik kafedralarining mas'ul oʻqituvchilarining imkoniyatlari darajasida hal qilish mumkin.

Oʻquv rejalarini shakllantirib boʻlganimizdan soʻng "tanlov fanlari katalogi"ni tuzib, ularni talabalar tanloviga taqdim qilishimiz zarur. Shu orqali oʻquv rejalaridagi fanlar talabalarning qiziqishlariga, kadrlar iste'molchilarining talablariga qay darajada mos kelishini bilib olish mumkin.

6) Registrator Ofisi. Amaldagi ta'lim tizimida talabalar kontingenti bilan dekanatlar, oʻquv boʻlimi, kadrlar boʻlimi, qabul boʻlimi kabi koʻplab boʻlinmalar shugʻullanishadi. Talabalar kontingenti bilan shugʻullanadigan markazlashgan boʻlinma esa mavjud emas.

Kredit-modul tizimida talabalar kontingenti bilan markazlashtirilgan bo'linma – Registrator Ofisi shug'ullanadi. Uning vazifasi - akademik taqvim tuzish va uning o'z vaqtida bajarilishini nazorat qilish, qabul komissiyasining ishini tashkil qilish, fanlarga yozilishni tashkil qilish (Enrollment), akademik guruhlarni shakllantirish, kirishda bilimlarini aniqlashni tashkil qilish va uni nazorat qilish, yakuniy nazorat va oraliq attestatsiyalarni tashkil qilish va oʻtkazish, yakuniy davlat attestatsiyasini tashkil qilish va o'tkazishni nazorat qilish, talabalarning shaxsiy hujjatlarini arxivgacha saqlash, "Registrator" ma'lumotlar bazasini shakllantirish va muntazam yangilash, transkriptni yuritish va unga talabalarning tantanali kiritish, marosimlarni tashkil gilish (bitiruvchilarning diplomlarini rasmiylashtirish va tantanali ravishda taqdim etish), talabalar kontingenti boʻyicha statistika yuritish kabi vazifalardan iborat boʻladi.

Bu tuzilma kredit-modul tizimida talabaga qaratilgan boʻlinma boʻlib, uni kredit-modul tizimiga toʻliq oʻtilgunga qadar vaqtincha dekanat va boʻlimlardan xodimlarni jalb qilish orqali tashkil qilish mumkin.

- 7) Modulli oʻqitish. Kredit-modul tizimining amaldagi ta'lim tizimidan farq qiluvchi jihatlaridan yana biri shundaki, bunda fanlar modulli asosda tashkil qilinadi va oʻqitiladi. Ya'ni har bir modul (fan va uning boʻlimi) kirish nazorati, nazariy materiallar, amaliy va laboratoriya ishlari materiallari, mustaqil ish topshiriqlari, keyslar, nazorat materiallari, testlar, tarqatma materiallar, glossariy, adabiyotlar, chiqish nazoratlari va h.k. qismlardan tashkil topgan boʻladi.
- 8) Talabaning shaxsiy traektoriyasi. Kredit-modul tizimida talabalarni hayotda mustaqil boʻlishga koʻniktirish amaliyoti qoʻllaniladi. Ya'ni, talabaga oʻz

shaxsiy traektoriyasini tuzish va har semestrda boshqa akademik guruhda oʻqish imkoni beriladi.

Shuningdek, talabalarni tabaqalab oʻqitishga jiddiy e'tibor qaratiladi, bunda ilgʻor talabalarni alohida oʻqitish orqali ta'lim samarasi oshirish, ularning akademik yutuqlariga zamin yaratish mumkin.

9) Yozgi semestr va ekstern imtihonlar. Sust oʻqiydigan talabalarning fanlarni qayta-qayta topshirishlariga chek qoʻyiladi. Fanni birinchi qayta topshirishdan oʻta olmagan talabaga yozgi semestrda fanni qayta oʻqishga imkon beriladi.

Ilgʻor talabalarga esa semestr boshida ekstern imtihon topshirish orqali kreditlarni oldindan olish imkoni ham taqdim etilishi mumkin.

10) Baholash tizimining shaffofligi. Amaldagi ta'lim tizimida haligacha "oʻqituvchining oʻzi oʻqitib - oʻzi baholash" amaliyotini kuzatish mumkin.

Kredit-modul tizimida esa oʻqituvchi asosan oʻqitish bilan shugʻullanadi. Baholashni esa komissiya amalga oshiradi. Ya'ni, pedagoglar "lektor" va "tyutor" larga ajratiladi. Lektor — nazariy bilim beradi, tyutor — nazariy bilimlar asosida talabalarning amaliy koʻnikmalarini shakllantiradi, oddiy qilib aytganda talabalarni imtihonga tayyorlaydi. Imtihonni esa komissiya qabul qiladi.

Oʻzbekiston Respublikasi Prezidentining 2018 yil 5-iyundagi PQ3775-sonli Qarorida muayyan fandan dars bergan pedagogning yakuniy nazorat jarayonlaridagi ishtiroki istisno etildi va talabaning oʻzlashtirish darajasi — professor-oʻqituvchilar faoliyatini baholashning asosiy mezoni etib belgilandi. Ya'ni, endilikda "oʻqituvchining oʻzi oʻqitib-oʻzi baholash" usuli kun tartibidan olib tashlandi.

Kredit – modul tizimini joriy etish boʻyicha takliflar

Oʻzbekiston Respublikasi Vazirlar Mahkamasining Muhammad al-Xorazmiy nomidagi Toshkent axborot texnologiyalari universitetida kadrlar tayyorlash tizimini tubdan takomillashtirish va samaradorligini oshirish chora-tad birlari toʻgʻrisidigi Vazirlar Mahkamasining 2018-yil 24-iyuldagi 569-son qaroriga asosan Toshkent axborot texnologiyalari universiteti va uning filiallarida ta'lim tizimi kredit-modul tizimiga oʻtkazilgan edi. 2021-2022 oʻquv yilidan boshlab Oʻzbekistonning barcha oliy oʻquv yurtlarida oʻquv jarayoni kredit-modul tizimi asosida tashkillashtirildi [4].

Universitet va uning filiallarida ta'limning kredit tizimini joriy etishning asosiy vazifalari etib quyidagilar belgilangan edi:

- rivojlangan davlatlarning axborot-kommunikatsiya texnologiyalari sohasidagi ilgʻor tajribalari va tavsiyanomalardan foydalangan holda, xalqaro ta'lim standartlarini joriy qilish, Universitet va uning filiallarini malakali professor-oʻqituvchilar bilan ta'minlash, sifatli oʻquv dasturlari va oʻquv materiallarini ishlab

chiqish orqali ta'lim sifatini oshirish;

- xorijiy oliy ta'lim muassasalari bilan talabalar, professor-oʻqituvchilar, izlanuvchilarning almashinuv dasturlarini kengaytirish;
- zamonaviy ta'lim texnologiyalari va oʻquv jarayonlarini tashkil etishning samarali shakllarini oʻzlashtirish orqali pedagog kadrlar salohiyatini oshirishga koʻmaklashuvchi raqobat muhitini yaratish;
- talabaga ta'lim dasturini mustaqil shakllantirish imkoniyatini yaratish va bilimini baholashning oshkoraligini ta'minlash.

Oʻtgan davr mobaynida ushbu qarorni amalga oshirish va ta'lim tizimida kredit – modul tizimini joriy etish boʻyicha qator ishlar amalga oshirildi. Lekin shu bilan birga hozirgi kunda kredit tizimi oʻz maqsadiga erishdi deb hisoblash qiyin. Bunga ob'ektiv va sub'ektiv sabablar mavjud boʻlib, ular kredit tizimining toʻliq tadbiq etilishiga toʻsqinlik qilmoqda.

Bizning fikrimizcha quyidagi ishlarga alohida e'tibor berilishi lozim.

- 1. Oliy ta'lim jarayonini kredit-modul tizimi asosida tashkillashtirish uchun kredit modul tizimiga bevosita oid hamda oliy ta'lim oʻquv jarayonining parametrlarini belgilovchi me'yoriy hujjatlarga oʻzgartirishlar va qoʻshimchalar kiritish. Kredit tizimini tashkil etishga zid boʻlgan tushunchalarni bartaraf etish va cheklovlarni bartaraf etish.
- 2. Har bir talabani butun ta'lim olish davri bo'yicha majburiy va tanlov zaruriy fanlari nomlari, har bir fan bo'yicha kreditlari ko'rsatilgan o'quv rejalari hamda fan sillabuslari va boshqa o'quv-uslubiy materiallarni o'z ichiga olgan o'quv metodik kompleks bilan ta'minlash.
- 3. Professor-oʻqituvchi va talabani ularning oʻqish shaklini (kunduzgi, sirtqi, masofaviy va kechki) hisobga olgan xolda ishlab chiqilgan universitetdagi kredit tizimi tuzilmasi va faoliyati boʻyicha toʻliq yoʻriqnoma bilan ta'minlash.
- 4. Mustaqil ta'limni (oʻqish shaklini hisobga olgan holda) tashkil etish metodikasini va uslubiy ta'minotini ishlab chiqish.
- 5. Talabalarning professor-oʻqituvchilarni va fanlarni tanlash huquqini amalga oshirish.
- 6. Talabalarning fanlar boʻyicha ruxsat etilgan soatlardan ortiq sababsiz dars soatlarini qoldirishlariga yoʻl qoʻymasliklariga erishish va ularning tegishli fanlarni qayta oʻqishlarini ta'minlash.
- 7. Kafedralar tarkibini va professor-oʻqituvchilar yuklamalarini oʻz vaqtida shakllantirish maqsadida talabalarning fanlarni tanlash jarayonini tegishli oʻquv semestridan 2 oy oldin oʻtkazish.
- 8. Talabalar bilan mustaqil ishlar samaradorligini va oʻquv jarayoni sifatini keskin oshirish maqsadida professor-oʻqituvchilar yuklamalarining oʻquv mashgʻulotlari soatini kamaytirish. Bunda umumiy 1540 soatli yuklamadan oʻquv mashgʻulotlariga (ma'ruza, kurs ishi, amaliy, laboratoriya va seminar mashgʻulotlari olib borish, bitiruv ishi va magisterlik dissertatsiyaga rahbarlik

xamda maslahat berish, amaliyotlarga rahbarlik va boshqalar) - 40%, oʻqituvchi rahbarligida mustaqil ishlarni olib borishga - 30%, ilmiy va metodik ishlarga-30% ajratilishiga erishish.

Shubhasiz, ushbu takliflarning qisman boʻlsa ham amalga oshirilishi oliy ta'limda oʻquv jarayoni sifatiga ta'sir etuvchi omillardan boʻladi.

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II.ОПЫТ РЕАЛИЗАЦИИ ПРОЕКТОВ ERASMUS+

UZBEKISTAN: A REPORT ON LIVESTOCK PRODUCTION AND THE PROVISION OF VETERINARY SERVICES

Romagnoli S., Faustino A., Adilov S., Arney D., Israilov Z., Guidi A., Paluanov B., Yulchiev J., Hasanov Sh.

Abstract: Following the breakup of the Soviet Union the agricultural sector in Uzbekistan has undergone a deep restructuring. Private ownership of land is currently prohibited by law, as is the use of land as collateral for receiving bank loans. However, several new laws enacted since 1992 have created favourable legislative conditions for a variety of types of farming. The most recent reforms of 2018/2019 aim at the establishment of private farm clusters based on contract farming, replacing the state procurement system. Currently there are 4.7 million *dekhkan* (smallholder) farmers with land plots of 0.35–0.5 ha and largely based on household labour. Thanks to the hard work of these farmers, livestock currently constitutes 40% of total Uzbekistan agricultural output. During the last two decades the number of cattle and sheep/goats has more than doubled.

However, despite recent improvement in the agricultural economy there are some barriers restraining production efficiency of the agri-food sector such as a) weak access to finance, b) poor animal health due to weaknesses of the public and private veterinary services and poor animal feeding, c) inadequate supply of fodder due to the small amount of land which can be used to produce fodder (only 5%), and d) the cultural loss of experience in the agricultural and farming business after the demise of the Soviet era. Productivity of livestock could be the key for further income gains for families in rural areas as livestock-keeping activities contribute from 45% to almost 70% of family income depending on areas of the country The promotion of more effective and viable veterinary services requires the creation of an enabling environment to encourage the private sector through provision of incentive packages such as access to better technologies and training; improving the budget allocation to facilitate provision of essential public animal health infrastructure; strengthening the capacity of Zoo-Vet Stations and establishing a reporting system such as Animal Identification Database to facilitate collection of information on veterinary drugs/vaccine performance.

Key words: Uzbekistan; Livestock Production; Cattle; Sheep; Poultry; Meat; Milk; Veterinary Services

Аннотация. Совет Иттифоки парчаланганидан сўнг Ўзбекистонда кишлок хўжалигида кенг кўламли реструктризация амалга оширилди. Хозирда ерга хусусий эгалик килиш, банк кредити олиш учун ердан гаров сифатида фойдаланиш конун билан рухсат этилмаган. Бирок, 1992 йилдан буён қабул килинган бир катор ислохотлар кишлок хўжалиги тизимини такомиллаштириб, фермер хўжаликларидан кластерларгача бўлган кулай конунчилик тизимии яратди. Хозирги кунда 0,35-0,5 га ер участкаларига эга бўлган ва асосан оилавий мехнатига асосланган 4,7 миллион дехкон (уй хўжалиги) хўжаликлари мавжуд. Бугунги кунда Ўзбекистон кишлок хўжалиги махсулотларининг 40 фоизини чорвачилик ташкил этиб, сўнгги йигирма йил ичида корамол ва кўйлар/эчкилар сони икки баравардан кўпрок ошди.

Бироқ, қишлоқ хўжалиги иқтисодиётидаги сўнгги ўзгаришларга қарамай, қишлоқ хўжалигининг озиқ-овқат тармоғининг ишлаб чиқариш самарадорлигини секинлаштирувчи баъзи тўсиқлар мавжуд, масалан: а) молиялаштиришнинг заифлиги, б) ҳайвонларнинг соғлиғининг ёмонлиги, с) ем-хашакнинг етарли даражада таъминланмаганлиги ва д) озиқ-овқат маҳсулотларининг исрофгарчилиги. Совет давридан кейин қишлоқ хўжалиги, хусусан деҳқон хўжаликлари фаолиятидаги тажриба ветеринария хизматларини давлат томонидан рағбатлантириш орқали хусусий секторда қулай муҳит яратишни талаб қилади. Ушбу мақолада мавжуд ҳолат таҳлил қилиниб, керакли хулосалар қилинган.

Калит сўзлар: Чорвачилик, қорамолчилик, қўйчилик, паррандачилик, гўшт етиштириш, сутчилик, ветеринария хизмати, комбинирлаштан таълим

Introduction

Uzbekistan is a country roughly the size of France (total area of 447,400 km²) with the largest population in Central Asia of about 34.5 million¹, and is characterized by deserts and mountains with only 9.6% of arable and irrigated land. The country has huge environmental problems deriving from decades of environmental neglect under the Soviet Union. The diversion of water from the two rivers Amu Darya and Syrdarya for cotton cultivation and industrial purposes contributed to the dramatic shrinkage of the Aral Sea creating what is considered the greatest ecological and social tragedy of the XX century. The resulting desertification has increased soil salination due to spread of salt from the evaporated Aral Sea bed, particularly in the northern Republic of Karakalpkastan (Figure 1). Soil degradation, coupled with heavy use of agrochemicals and lack of

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¹ <u>https://stat.uz/en/</u>

water treatment plants, has caused growing concentrations of chemical pesticides in underground water supplies in much of the North and Central parts of the country. Despite some recent improvements in the general environmental conditions, particularly of Central and South-Eastern Uzbekistan, environmental contamination remains a public health issue especially around the Aral Sea, as demonstrated by maternal and infant morbidity and mortality rates being among the highest in the former Soviet states.



Fig. 1 – An area of salinated soil north of Nukus (Republic of Karakalpakstan, Uzbekistan). The diversion of water from the two rivers Amu Darya and Syrdarya, both tributaries of the Aral Sea has caused a dramatic shrinkage of the Aral Sea bed. The resulting salination makes the land often unsuitable for agricultural purposes.

Since its independence from Soviet Union on August 31, 1991, Uzbekistan has been dealing seriously with its environmental issues in an effort to stimulate its economy and improve life conditions, especially outside of the largest cities and in rural areas. The agricultural and livestock sectors have been the subject of a number of reforms because of their important role played in the Uzbekistan economy, employing about 40% of the population and producing one third of the country's gross domestic product (Abruev et al., 2015). Nowadays, Uzbekistan's agricultural production still consists mostly of cotton, of which Uzbekistan is the fifth largest world producer and was the third largest world exporter until recently, and wheat. Following independence, the government opted for a slow "step-bystep" path in reforming agriculture; strong state control of production and marketing of "strategic crops" still continues today as government agricultural policy is currently aimed at further developing cotton and wheat production to support state hard currency earnings through export, and achieving self-sufficiency in grain production. However, the government of Uzbekistan started diversification of agricultural production in 2017, whereby cotton will be gradually phased out in

some areas to be replaced in favour of food crops such as fruits and vegetables. The aim of this document is to review the current situation of the Uzbekistan livestock sector, and type and organization of veterinary services in order to highlight areas of potential intervention of the BUzNet project² which is aimed to improve animal health, increase production efficiency of the livestock sector and therefore raise farmers' profitability as well as the country's economic growth.

Uzbekistan Farms

Types of Farms and their restructuring – The collectivization of the agricultural sector in Central Asia which occurred during the 1930s' met with peasant resistance and protest with villagers often turning to violence and committing acts of sabotage among which were the burning of crops and the slaughter of animals, both of which contributed to the famines of the Soviet period (Courtois et al., 1999). At the time of independence in 1991 Uzbek agriculture was still characterized by large-scale, state-funded sovkhoz farms and self-financed kolkhoz farms. Performance levels and output prices were set by state procurement targets, which caused discrepancies between the actual potential production of single farms and what the government was expecting of them with continuous losses in agricultural and livestock production (Djanibekov et al., 2012). Following the breakup of the Soviet Union the agricultural sector in Uzbekistan has undergone deep restructuring. The allocation of land to producers has occurred through leasing contracts resulting in the development of three different types of farms: large private farms (shirkats, previously state-owned cooperatives), smallholder or dehkan farms and private or fermer farms. Agricultural Cooperatives (Shirkats) are the legal successors of the former kolkhozes and sovkhozes, which deal mainly with the production of the strategic crops cotton and wheat. At the beginning of each year the shirkat administration receives a state order plan for cotton and/or wheat production quotas that require them to allocate a defined area of land to these crops. The provision of credit, input, and output markets for cotton and wheat are partly administered by the Government which identifies the amount of production. Growing crops different from the state order is prohibited (Robinson, 2020).

Individual or Household Farms or *Dekhkan Farms – Shirkat* employees and private farmers have an additional source of income from personal household plots of less than 0.35 hectares call *tomorka*. An initial allocation of 0.024 ha to the *dehkan* families in rural areas was accomplished in the early 1990's. Since independence the total area under these smallholdings has increased significantly

² https://buznet.up.pt/

and has reached 750,000 ha. The *tomorka* are usually located on former *shirkat* lands and are geared primarily towards agricultural production. House construction is prohibited on these lands. Since 2000, the state has encouraged farmers to register their *tomorka* as *dekhkan farms* on the basis of long term (50-year) leasing. The re-gistration helps farmers to receive credit. This type of production could be consi-dered as a purely private type because *dekhkan* farmers make independent decisions on production and marketing. Limiting factors are the size, location of the farm, irrigation and lack of mechanical equipment (Figure 2). Currently there are 4.7 million *dekhkan* farmers with land plots of 0.35–0.5 ha and they are largely based on household labour.



Fig. 2 – Working and irriganting the land by hand on a dekhkan farm in central Uzbekistan. Dekhkan farms are characterized by small land plots (0.35-0.05 ha) and are generally based on household labour. The cost of mechanized equipment is a serious constraint for the development of agriculture in Uzbekistan.

Dekhkan farmers are not subject to control by the Government but are also not provided with any relevant public services (access to fertilizers, fuel, machinery, credit etc.) (World Bank report, 2021). However, as dekhkan farmers virtually "own" their land they invest in it trying to orient their production towards more profitable and less water-demanding products (Robinson, 2020).

Private or Family Farms or *Fermer Khohajaligi* are a new market-oriented production unit averaging about 20 hectares nationally whose number increased rapidly in the late 1990s (reaching about 63,000 in 2002), and accounting for almost 1.2 million hectares in 2002 (Zorya et al., 2019). Similarly to *dekhan* famers, private farmers may lease land from the state for up to 50 years. However, in several provinces only 15-18 % of farmers have leased land for 50 years, with

80-82 % of farmers receiving land for 10 years and only 2 % receiving land for 20-30 years. According to the Law on Farms (1992), private farmers are fully independent from local authorities and *shirkats* in organizing agricultural production. However, private farmers also have to produce state-ordered crops, limited not only to cotton and wheat, but also including fruit, and vegetables. In 2007 there were approximately 75,000 private farms, with land under 30–50-year leases. Private farms utilize 5.8 million ha of state-leased land (including uplands and pastures) with an average farm size of 75 ha (Robinson, 2020).

Shirkat farmers dominate wheat and cotton production (under tight governmental control), while dekhkan farmers dominate the horticulture and livestock subsectors (which are much less controlled by the Government); fermer farms are mostly involved in livestock production and account for the majority of sheep and goat production. In 2004 all shirkats were transformed into fermer farms, whose number reached its maximum level of 220,000 units in 2007. Unsatisfied with the productivity of individual farms, and aware of a mismatch between water supply infrastructure and farm sizes, the government started consolidating farms in 2008. However, government-driven increased farm size has not produced the expected positive outcomes of economy of scale due to a variety of reasons among which poor soil quality, insufficient water, high production costs and government driven low pricing for cotton and wheat. After 2015, the diversification of crop rotations away from cotton and wheat became a major focus, and farm numbers increased again. Production of wheat has increased yet national needs are still being met by imports which in 2019 accounted for 43% of national production, up from 25% in 2010 (World Bank report, 2021). The government currently also aims to increase the output of fruits, vegetables, milk and livestock, whose production is highly favoured by dekhkan farmers as prices of these commodities are not regulated by government but follow market rules. In fact, the fixed pricing of cotton and wheat has been the indirect cause for the rapid increase in the number of cattle herds during the last decade. Farmers are expected to be integrated into multi-profile farms, which may engage in agricultural production and processing, preparation, storage, marketing, and provision of other services. The most recent reforms of 2019³ aim at optimizing farmland use through an increase in wheat- and cotton-producing farm size and establishing private cotton-textile and wheat clusters based on contract farming, thus replacing the state procurement system. The Government expects that the clusterization of the cotton sector, which started as a pilot project in the Navoi region, will ultimately involve up to 50% of the total agricultural area of the country. By attracting private investment, this strategy is

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³ The Resolution of the Cabinet of Ministers No. 14 from January 11, 2019.

intended to generate higher agricultural output than previous initiatives of farm restructuring (Petrick and Djanibekov, 2019). A strategy to reform state-owned enterprises and gradually reduce them by 75% during the period 2021-25 was approved by the Government in early 2021 (World Bank, 2021).

Uzbekistan Livestock

Livestock production in the Central Asian republics suffered a serious setback after the demise of the Soviet Union in 1991. However, Uzbekistan was the only country in which livestock numbers did not plummet but rather remained stable for a decade. Since 2002 the Uzbek national livestock herd number has shown a steady increase reaching 1.5 times its 1991 levels (Oripov and Davlatov, 2018; Robinson, 2020). Livestock is currently considered as one of the more dynamic sectors of Uzbek agriculture, accounting for over 40% of the gross national agricultural output (Oripov and Davlatov, 2018). Interestingly, the vast majority of livestock are owned by, and reared, on *dekhkan* farms in spite of their small size (*dekhkan* farms use less than 15% of arable land) (Robinson, 2020). *Dekhkan* farms, family farms and *shirkhat* cooperatives account for 94%, 5% and 1% of cattle ownership and 84%, 8% and 8% of sheep/goat ownership, respectively (Robinson, 2020).

Geographical distribution –The distribution of livestock production farms is determined by proximity to population centres and agro-ecological zones. Dairy production is concentrated in irrigated areas close to urban centres, and beef production is mostly concentrated in low mountain pastures. Small ruminants which are used for meat, as well as skins and wool, are raised in semiarid and desert locations in the west, where horses and camels are also reared; karakul sheep rearing occurs mostly in *shirkats* (Figure n. 3). Poultry production is found countrywide in *dekhkan* farms but large scale poultry production units are quickly developing in suburban areas of large cities. In addition, there are over 100 karakul sheep *shirkats* and a small number of cattle *shirkats* in higher rainfall pasture areas although most of these *shirkats* are being reorganized through auction by the Government. The karakul *shirkats* are important because they control large areas of arid rangeland mainly in the northwest of the country. Over the last two decades the production of cattle and sheep/goats has increased from 674 and 138 (in 2000) to 1,869 and 381 (in 2020) thousand tons of liveweight, respectively; during the same

period bovine milk production has increased from 3,612 to close to 11,000 thousand tons⁴.

Constraints to Development - Despite recent improvement in the agricultural economy thanks to government-driven reforms, there are some barriers restraining production efficiency, lowering the income in the private sector of the agri-food economy. These are briefly summarized here.



Fig. 3 – A shepherd with his Karakul sheep from western Uzbekistan (Bukhara Region, Uzbekistan). Small ruminants are mostly used for meat, skin and wool and are frequently raised in semiarid and desert locations in the northern and western regions of Uzbekistan.

• Weak access to finance – Access to financial services in Uzbekistan is the lowest among all Central Asian countries⁵. Uzbek farmers have difficulties in financing their enterprises. Public and private banks do offer credit services to farmers albeit at prohibitive (18-24% annual) interest rates, and even when rates are affordable administrative requirements are fairly complex (Naumov and Pugach, 2019). This has to do with the financial sector being undercapitalized (because of inadequate liquidity and lack of independence) but also the agricultural sector being characterized by high production risks, high transaction costs of lending to small livestock producers and an inadequate supply chain finance and low productivity. High production risks and low productivity are the result of a combination of factors including animal health, animal feeding, and genetics (Naumov and Pugach, 2019).

⁴ https://stat.uz/en/official-statistics/agriculture

⁵ World Global Findex Database (2017) https://globalfindex.worldbank.org/

- Animal health Animal health is constrained by weaknesses in public and private veterinary services and exacerbated by poor animal feeding. Animal feeding is constrained by limited land availability of fodder and the abandonment of cotton/fodder crop rotations, degradation of pastures, and the limited availability and cost of concentrate feed. Animal genetics is constrained by low knowledge and weak breeding strategies at farm level, inadequate artificial insemination infrastructure and services (lack of reproductive management, poor heat detection, low herd health management efficiency), and the loss of local genetic resources for phenotypes adapted to Uzbekistan's climate.
- Restriction of fodder production In Uzbekistan there is an inadequate supply of fodder due to the fact that cotton and wheat production quotas severely restrict the amount of land which can be used to produce fodder (only 5%). Since 2006, private cattle farms with at least 30 heads of animals have been allocated an additional 0.45 ha of arable land per animal head for fodder production. In 2015, the Government reallocated 170,000 ha of cotton/wheat land to other crops, including fodder production, to help address the lack of fodder. Cotton seeds are still frequently used as fodder for dairy cows (Figure 4).
- Loss of local farming knowledge One of the most important factors which has thwarted (rural) economic development is the cultural loss of experience in the agricultural and farming business after the demise of the Soviet era. Local agricultural and farming culture has been 'lost' during the period of Soviet colonialism. With collectivisation in the 1920s, livestock production was transferred from an almost purely domestic affair into a collectivised and specialised industry of the state. Despite post-WWII reforms of agricultural production allowing for limited domestic production of livestock within the household economy, large amounts of indigenous knowledge previously transferred directly from parents to their children had already been lost at that time. With de-collectivisation and the breakdown of existing collectives occurring post-1991 this attrition of knowledge continued, and the healing process is quite slow (Wall and Evers, 2006).

Governmental efforts to address some of these constraints have included tax exemptions, input subsidies, additional veterinary services, and lower interest loans for the purchase of livestock (Abruev et al. 2015). An improvement of veterinary manpower and professionalism with particular reference to animal breeding and genetics, animal feeding, artificial insemination and reproductive management is considered vital to allow any substantial improvement of economic development of

the Uzbek agri-food business, which was highlighted in the "Agricultural development strategy for 2020-2030" 6

Livestock Industry in Uzbekistan

The livestock industry of Uzbekistan is characterized by the historical presence of cattle breeding and sheep breeding while poultry and rabbit breeding as well as fish farming are currently being developed. Cattle breeding is highly developed in irrigated zones. Cattle-breeding farms are concentrated in *dehkan*, collective and cooperative farms where cereal crops and cotton are also produced (both of which are used as animal feed). Cattle raised include Black-motley, Red steppe, Schwitz and Bushuev cattle, as well as local Zebu-type breeds. Several farms also raise Holsteins from The Netherlands, Poland and Austria. In steep, mountainous and foothills zones, as well as in semi deserted zones cattle breeds like Schwitz, Santa-Cruz, Kazakh white-headed and their cross-breeds with local indigenous cattle play a fundamental role in maintaining an important genetic stock. Stock-breeding as a whole is concentrated and developed in *dekhkan* and *fermer* farms.



Fig. 4 – Cotton seeds used to as part of the daily ration for dairy cows in a shirkat farm near Nukus (Republic of Karakalpakstan, Uzbekistan).

The government policy has mainly been directed to maintaining the number of livestock even if this has negative effects on productivity. In fact, since independence the number of cattle has increased at an annual growth rate of 5% in all types of farming, while by contrast the number of sheep and goats has initially fallen by 12%. When compared to other former Soviet countries, Uzbekistan has not seen a decrease in the quantity of its livestock during the transition from the

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⁶ Presidential Decree #5853 "On Approval of the Agricultural Development Strategy of the Republic of Uzbekistan for 2020-2030" 23th October, 2019

pre-reform period to 1991 and beyond. However, since independence, significant institutional changes have occurred which have affected livestock numbers according to farm types. There has been a decline in the number of all types of livestock held by large agricultural enterprises and an increase in the quantity held by household farms, except for pigs and poultry. Poultry production has collapsed in all types of farming systems due to the lack of specialized feed, medicines and veterinary care and loss of local knowledge. Since 1998, pig production has shown signs of improvement due to the development of the sausage industry, for which pork is a basic ingredient.

The second most frequently owned type of livestock is sheep and goats, of which *fermer* farms raise more than 4 times on average than *dekhkan* farms in most regions. Many small holdings own horses in the Bukhara province, while in some other provinces such as Syrdarya this number is insignificant. A negligible number of private farms raise pigs.

The main characteristic of the sector is that the majority of livestock products are from *dehkan* households which produce more than 94% of the beef/mutton/chicken, 95.6% of the milk, 85.4% of the wool and 57.3% of the eggs. They own more than 11.5 million head of cattle (94% of the total cattle population), 16 million head (or 83%) of sheep and goats, 85% of horses and 63% of chicken⁷. As of January 1, 2019, the total cattle population was 12,726 million heads⁵. Private livestock farms, meanwhile, produce only 2.9% of the beef, 3.6% of the milk, 10.7% of the eggs and 8% of the wool of the total livestock production. Specialized commercial farms or agriculture enterprises are called AgriFirms and their contribution in meat production is about 2.7%, in milk it is less than 1%, in wool less than 7%, while their egg production constitutes 1/3 of the total number of eggs produced⁵.

Livestock productivity in Uzbekistan is very low compared to the European level. Analysis of the available data for agricultural enterprises indicates a sharp decline (by more than a half) in milk productivity/cow and eggs laid/hen occurring after 1991. In the surveyed farms, the average milk yields in litres per day were 9.6 in summer and 6.7 in winter. The average numbers of eggs laid per hen per month were also very low: 10.0 in winter and 13.2 in summer. However, since the second half of the 1990s' the State has taken serious measures to improve animal vaccination services and provide protein-rich feed. As a consequence, the cattle as well as the small ruminant population in Uzbekistan have more than doubled since 1991 resulting in an increase of the contribution of livestock production to the gross agricultural output from 30-35% in the 1980's to 46% in 2016⁴. This has had a

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⁷ https://stat.uz/en/official-statistics/agriculture

positive effect on human welfare in the country, increasing rural incomes and contributing to increased availability of animal proteins in rural and urban household diets. However, the need for livestock feed in the country is 120 million tons, but only 47 million tons were produced last year⁸

Animal Breeding in Uzbekistan

There is a continuous effort by the Uzbek State Programme for Livestock Development to improve the quality of livestock breeds (Lerman, 2008; Eshonqulovich et al., 2018). However, there are still critical issues hampering animal breeding services such as insufficient research support for pedigree breeding; insufficient pedigree stock and frozen semen procurement from abroad; insufficient feed resources and veterinary services; lack of required hygiene norms in livestock management; and incomplete public awareness about the importance of pedigree breeding. A number of objectives set forth by the "Law on Pedigree Animal Breeding" have not been fulfilled, including conservation and rational use of pedigree resources (Noble, 2015). Additional constraints include lack of awareness of the importance of artificial insemination (AI), and insufficient number of AI units and a lack of qualified veterinary specialists for reproductive biotechnologies (such as artificial insemination or embryo transfer) and their low motivation to carry out this type of work.

The recommended policy actions include: reinforcing genetic improvement; revisiting the "Law on Pedigree Animal Breeding"; encouraging public-private partnership; developing breed standards; initiating herd/flock books for existing local breeds; establishing an identification, registration and performance testing system for purebred animals; ensuring adequate animal health and hygiene expertise and infrastructure; establishing livestock breeder's associations and societies (Noble, 2015).

Meat production in Uzbekistan

The main sources of meat in Uzbekistan are from cattle, sheep and goats, chicken, horse and fish. Most of the red meat production comes from cattle, while the main producers of red meat are the smallholders (*dekhan*) farms, which produce 94% of domestic meat. Since 1991 Uzbekistan has practiced restriction on meat exports in an effort to guarantee self-sufficiency, hence meat produced from beef cattle was strictly for domestic consumption (Noble, 2015). In early 2017, the Government lifted all export restrictions for meat products and now Uzbek producers can export their meat produce based on regional market demand and supply. However, the country imports beef to meet domestic demand. Currently the red meat industry is constrained by the low genetic potential of existing stock; inadequate marketing system including overdue payments, low prices and

⁸ https://www.uzdaily.uz/en/post/53019

transportation problems; inadequate infrastructure for veterinary services, inadequate feed resources, weak livestock farmers' organizations and inadequate technical support services. The essential required policy actions include provision of cost effective and relevant AI technologies, improving marketing infrastructure, strengthening the livestock market price and related information, promoting public-private partnership for infrastructure investments and reinforcing the extension services and farmer organizations (Zorya et al., 2019).

Dairy production in Uzbekistan

The dairy sector is the major livestock sub sector in Uzbekistan, contributing about 45% to livestock GDP in 2016⁴ The small family producers, dehkan farms, sustain the dairy sector. About 95% of the milk produced during the period 2016-2019 was produced in the smallholder dehkan farms. However, milk production in Uzbekistan operates well below its potential and has not improved much since 1991. Average milk yields for local breeds rarely exceed 7 kg per day and 1,200 kg per lactation (Siegmund-Schultze et al., 2013). Even cows of European or North American highly productive breeds produce no more than 25 (instead of 35-40) litres of milk/day due to lack of knowledge and skills of breeders ⁸. The principal constraints to dairy sub-sector development include the limited dehkan farmer access to land; lack of access to sufficient fresh and conserved forage and the unreliable quality of forage and feed; limited access to reliable, quality animal health services; low genetic merit of much of the national herd; inadequate sanitary conditions at farms and processing plants; constrained direct access to processors and markets; and lack of asset building resources including training/advisory services, accessible financing and business capacity to increase sectoral and microenterprise productivity and efficiency (IFAD, 2015).

The appropriate policy response will consist of improving the capacity and quality of the AI service delivery through capacity building programmes and public-private partnerships; strengthen cooperatives; strengthen milk inspection; improve marketing infrastructure; improve farmers' linkage to existing and emerging markets and provide land for household level improved grass and leguminous feed production (Zorya et al., 2019).

Extension services

The responsibility of rural extension services is to transmit necessary knowledge to farmers and thus enable them to increase production levels, improve farm management, and achieve higher profitability. Currently the agricultural production support organizations can scarcely fill the knowledge gap of farmers and there is a lack of links to research organizations and communication modus. Many non-governmental organizations involved in extension and training of farmers in the country do not target animal production but rather are mostly active in the areas of farm management, crop production, horticulture, drying of fruits and

vegetables, bee-keeping, wheat, etc. Most services are usually discontinued after the completion of the period of donor funding (Lerman, 2007). Additional constraints include low allocation of public or private funding to extension services, low private sector involvement and low capacity of extension agents (Lerman, 2007).

In order to improve the livestock extension delivery system, the services should be user-oriented, cost-effective and demand-driven. Public-private partnership in extension service delivery is crucial. In addition, sufficient expertise in both the quantity and quality of dissemination, research-training- extension-farmer linkage and adequate infrastructure and facilities are important for efficient livestock extension service delivery (Zorya et al., 2019).

Veterinary Services in Uzbekistan

In Uzbekistan, the veterinary service is considered the most developed subsector supporting livestock because of its capillary diffusion in regional and district branches and set of services provided. At the district and village levels, veterinary services are provided by public and private Zoo-Vet stations (ZVS). Public ZVSs provide animal vaccination, treatment and AI services to farmers while private ZVSs mostly deal with general animal health issues and, upon agreement with the state veterinary services, also provide animal vaccination and AI. The State Programme for Livestock Development envisages continuous establishment of both public and private ZVSs (Yusupov et al. 2010). However, inadequate buildings and equipment as well as insufficient contribution from the state budget to support services of remote veterinary stations hamper the establishment of more ZVSs. Additional constraints include a lack of the necessary veterinary drugs and their high cost.

The main approaches to the promotion of more effective and viable (public and private) veterinary services requires the creation of an enabling environment to encourage the private sector. This could be achieved through provision of incentive packages such as access to better technologies and training; improving the budget allocation to facilitate provision of essential public animal health infrastructure; strengthening the capacity of ZVSs and establishing a reporting system such as an Animal Identification Database which would facilitate the collection of information on veterinary drugs/vaccine performance at all levels (Yusupov et al. 2010).

The training of Veterinarians in Uzbekistan

Currently there are four main veterinary faculties in Uzbekistan with an average of 400 graduates per year, of which approximately 250 are from the Veterinary Faculty in Samarkand and approximately 50 each are from the three veterinary branches of the universities of Tashkent, Nukus and Andijan. The Samarkand Agricultural Institute is one of the oldest universities in Uzbekistan,

founded in 1929. In 2018, the Samarkand Institute of Veterinary Medicine (SIVM) was established within the Samarkand Agricultural Institute⁹. Currently, the SIVM offers four veterinary-related degree courses such as veterinary science, veterinary therapeutics, biotechnology of animals and zoo engineering. Veterinary studies in all faculties last for four years leading to a Veterinary Bachelor degree which is recognized as satisfying national requirements for veterinary practice in Uzbekistan. There is wide consensus that this is not sufficient to comply with international standards for veterinary education such as a core curriculum as well as "day 1 competencies" as identified by international organizations such as the World Organisation for Animal Health¹⁰ (OIE) or the European Association of Establishments of Veterinary Education¹¹ (EAEVE). Equipment, instruments and facilities used by Veterinary Services, particularly for clinical training, are also insufficient to meet the standards. Despite strong recommendations by the (first) 2017 OIE Performance of Veterinary Services evaluation mission regarding this problem, the situation has not greatly changed. As the number of animals in Uzbekistan has rapidly increased in recent years, the demand for veterinarians has grown. Currently there are not enough specialists in cattle practice in Uzbekistan, particularly with regard to the provision of specialist reproduction services and foreign veterinarians are frequently invited as consultants by farmers⁸. This is adding pressure on the veterinary faculties to produce more graduates while jeopardising the quality of veterinary studies. This is one of the most critical issues for the future of the veterinary service in the country especially considering that there are 43 vocational colleges in Uzbekistan offering training courses for veterinary para-professionals within a National Qualification Framework: there is the risk of producing an abundance of paraprofessionals who might find themselves providing veterinary care without having veterinarians to work for.

Continuing education (CE) is regulated by the resolution of Cabinet of Ministers. Currently, it is obligatory for all veterinarians to complete a month-long CE training course every five years in order to maintain their license. These CE courses are subject to internal and external control by an appointed certification committee. The State Committee of Livestock and Veterinary Services of Uzbekistan and other interested parties organize other workshops and courses for veterinarians and veterinary para-professionals. However, CE training occurs mostly in traditional disciplines. Many veterinarians do not receive training in topics such as modern veterinary epidemiology/risk assessment, traceability and animal identification, food safety management systems, animal welfare, and small animal medicine for which expertise is not available in the country. The development strategy of the SIVM focuses on veterinary medicine and other

⁹ President's decree # 3703, May 8, 2018, "On the Formation of the Samarkand Institute of Veterinary Medicine" www.o<u>ie.int</u>

www.eaeve.org

animal-related disciplines by enhancing teaching quality and establishing an appropriate infrastructure. However, the adoption of a credit transfer system and the prolongation from four to five years of the veterinary education programme are pre-requisites to meet the demand of international standards for veterinarians on the job market. Such innovations are fundamental to increase the quality of education, attract international students and provide better animal care and quality of animal-derived food products. A capacity building of 20 teachers on veterinary medicine, food safety and livestock within the framework of the BUzNet ² project, plays an important role in enhancing the teaching quality in the four universities.

Governmental Incentivisation of the Livestock Sector in Uzbekistan

The economy of Uzbekistan has demonstrated high and stable average annual growth rates in recent years, largely as a result of deep economic reforms aimed at modernizing production and improving both infrastructure and the overall quality of life. Uzbekistan is currently regarded as belonging to the group of lowermiddle income countries (Kim et al., 2018). However, its stable growth has laid the basis for the country to further enhance its competitiveness and achieve a global standard level of economic development. Encouraged by this outstanding growth performance, Uzbek authorities have set an ambitious goal - to join the group of upper-middle income countries by 2030 (Trushin and Carneiro, 2013; Zorya et al., 2020), as spelled out in the national plan for the modernization of agriculture during 2017-2020⁹. This aims at "developing competitive value chains for domestic and export markets; stimulating rural job creation; improving reproduction, multiplication and dissemination of animal forage seeds; reaping economic benefits through improved productivity and targeted land allocation; developing viable, sustainable and climate-resilient farming systems" 12. In the livestock sector the President's Resolution highlights the development of livestock value chains, improved provision of private and public veterinary services, enhancing animal feed marketing to increase feed supply, creating elite or demonstration farms with high quality pedigree animals for reproduction (Figure 5), boosting animal productivity by carrying out national livestock breeding programmes, and by importing high quality stock of pedigree animals. Scientific programmes to select highly productive families of Uzbekistan adapted Swiss breed cows (Schwitz breed) are underway (Eshongulovich et al., 2018).

¹² President's Resolution #PP-2460 of December 29, 2015 on "Further Reforming and Developing Agriculture in 2016–2020"



Fig. 5 – A Dairy Demonstration Farm near Tashkent, Uzbekistan. The establishment of *elite* or *demonstration* farms was envisaged by the National Plans for modernization of agriculture within the framework of the President's Resolution of December 29, 2015, with the intent to develop a network of centres with high value pedigree animals for reproduction purposes.

Further cardinal changes of animal husbandry and veterinary training should also be implemented according to the Presidential Decree of March 28, 2019. The main objectives of this document are to ensure a sustainable increase in the number of livestock in the country, strengthening veterinary control and improving the quality of veterinary services, ensuring effective organization of animal health protection as well as food security and protection from epizootic diseases.

Within the framework of this document, the State Veterinary Committee will be reorganized into the State Veterinary and Livestock Committee, and be assigned responsibility to implement a unified state policy in this area. All educational (Veterinary Faculties at Samarkand, Tashkent, Nukus and Andijan) and research institutions (the Research Institute of Veterinary and Poultry, the Research Institute of Karakul sheep breeding and desert ecology, and the Research Institute of Fisheries) are to be supervised by the Committee.

The need for the organization of livestock cooperatives has been recently underlined by politicians in order to provide family farms with forage, veterinary services and agricultural technologies. Measures are also being taken to organize AI centres in each region, with the aim of implementing AI on at least 70 percent of cows by the end of the year, and to improve the breed qualities of 60 percent of cattle by 2025. This will require an improved interaction between veterinary services and quarantine, sanitation and epidemiology, thus implementing quality control procedures for the entire chain of livestock production. In 2019, Friday 13th November was declared Livestock Day ⁷

Conclusions

Further modernization of and growth in the livestock sector of Uzbekistan, particularly in the production of meat and milk, would have great social and economic benefits for the nation. Further development of the sector could also transform these products into export-oriented commodities, which would increase the foreign exchange earnings of the country. Since the independence of the country *dehkan* households have greatly benefited from the growth of livestock production, as due to allocation of land for their ownership the main share of livestock is now owned by them. There is a direct correlation between the welfare level of *dehkan* families and the size of land and the number of livestock they own.

Productivity of livestock could be the key for further income gains for families in rural areas. Currently, livestock-keeping activities contribute about 45% of family incomes in the Piedmont areas and more than 50% in the desert and steppe and semi-desert areas, while animal husbandry in the highland areas contributes up to 67% of family income. The well-being of rural families depends not only on the size of the land they can use, and the size of the herd, but also on the quality of their livestock, and access to productivity-enhancing technologies – especially feed (due to severe shortages), and proper veterinary care for animals (Zorya et al., 2019). Removing constraints to modernization in the livestock sector would substantially contribute to national and/or state development goals including poverty reduction, food security, economic growth and even mitigating climate change (Herrero et al, 2014; Shapiro et al, 2015).

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INTERNATIONALIZATION OF HIGHER EDUCATION VIA ERASMUS+ PROJECTS: THE CASE OF TALENT PROJECT

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Abstract: Internationalization of higher education activities is initiated all over the world with the support of the projects, grants, involvement of public and private organisations. The process is quite strategic and involves multiple stakeholders and agents. There is still an operational routine and experience which implement the requirements and fulfill the objectives of the projects.

The purpose of this article is to demonstrate the experience and dissemination of the best practices as well as challenges of the Erasmus+ TALENT capacity building project, which was implemented at the Westminster International University in Tashkent (WIUT) postgraduate programme.

This article includes the discussion about the market needs analysis, design of the master programme, mobility and the professional development programme for the academic staff members, validation of the programme, challenges of the project implementation and the master programme promotion and launch during the pandemic, the process of internal quality audit. Also, the paper provides recommendations for future project development and implementation.

Keywords: capacity building project, programme design, market research, pandemic time, mobility, HRM and talent development.

ERASMUS+ И ИНТЕРНАЦИОНАЛИЗАЦИЯ ВЫСШЕГО ОБРАЗОВАНИЯ: КЕЙС ПРОЕКТА TALENT

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Аннотация: Интернационализация деятельности высшего образования происходит во всем мире при поддержке проектов, грантов, привлечении государственных и частных организаций. Этот процесс является стратегическим и включает в себя множество заинтересованных сторон. В осуществлении проектов необходима операционная тактика и опыт, которые помогают реализовать требования и выполнить цели проектов.

Цель этой статьи - продемонстрировать и распространить опыт, а также проблемы проектов по наращиванию потенциала Erasmus+ на примере проекта TALENT, осуществляемого в программе магистерского образования Международного Вестминстерского Университета в Ташкенте (МВУТ).

Эта статья включает в себя анализ потребностей рынка, обсуждение разработки магистратуры, программы профессионального развития для преподавателей и мобильность, контроль качества, проблемы осуществления проекта, а также продвижения и запуска курса во время пандемии, процесс

внутреннего аудита проекта. Кроме того, в документе представлены рекомендации для будущей разработки и реализации проектов.

Ключевые слова: проект по наращиванию потенциала, разработка программы, исследование рынка, пандемия, мобильность, управление персоналом и развитие талантов.

Introduction

The Strategy of Actions of the Republic of Uzbekistan manifested time for educational reforms and innovative approaches to social development of the country. Higher education is one of the cornerstones and it is accountable for the development of future generations. To implement the changes and design the relevant and right programmes, higher educational institutions need collaboration with partners from Central Asia (CA) and European Union (EU) within the framework of Erasmus + projects to widen the outlook for the international best practices and cultivate innovation. The capacity building projects provide opportunities for transnational projects that allow to modernize the educational system, develop curriculum, and reinforce the relationship between the economic and educational environment (European Commission, 2022).

Westminster International University in Tashkent (WIUT) became a partner university for the TALENT Erasmus + project to establish a new master programme in Human Resource Management and Talent Development in collaboration with four EU universities and six Central Asian universities.

The main goal of the project was to create an accredited two-year TALENT master programmes in human resources management in six universities in Kazakhstan, Kyrgyzstan and Uzbekistan. The duration of the project was initially three years but due to a pandemic it was prolonged for one more year, and it is about to finish in October 2022.

Setting the scene for the curriculum development and project

According to the World Economic Forum's Center for the New Economy and Society (2018), there is a projected change in professions, and workforce transformation is not a matter of the distant future. Along with trends in Artificial Intelligence, digitalization, automatization, the roles that "leverage the human skills" such as Training and Development, People and Culture, and Organizational Development specialists are projected to grow. The Human Resource profession has a promising outlook.

Human Resource Management (HRM) is the function that is to align the human resource management strategy with business strategy and function as employees champion, administrative expert, change agent and business partner as commented by HRM guru David Ulrich (Kuipers, 2017). Human resource management and talent development has been accentuated on the governmental level of Uzbekistan. A regulatory framework has been adapted to enhance management of human resources in governmental organisations (resourcing, professional development, performance evaluation of human resources and management of organisations). Uzbek Presidential Decree № УП-4947 set the stage for the Strategy of Action of Uzbekistan's development in 2017-2021 that seeks to bolster state and public development and as commented by the Permanent Mission of the Republic of Uzbekistan to the United Nations (2017), special measures are planned to create a broad range of opportunities for upgrading skills, training at leading international companies and organizations and engaging in mutually beneficial cooperation with them.

Currently the human resource management at Uzbek companies is still implemented in the views of traditional personnel management. However, "during the last 5-7 years in Uzbekistan we are observing that the perception about the role of Human Resources is beginning to change" (AmCham Uzbekistan, 2018). The labour market is becoming more competitive and international, organisations are having to adapt and develop their practices to fit to these changes, the regulatory frameworks are being upgraded to international standards, all these changes require changes in the professional support that HR had traditionally provided. The European Union recognised this need and through the Erasmus program agreed to fund a collaborative project with a group for Central Asian Universities to develop a postgraduate program in HRM.

Market Needs Analysis

To analyze the Uzbek market and identify the demand for the HR profession, WIUT conducted market research that included round table discussions, interviews with HR managers and online questionnaires among employers. Respondents specified that currently there is a shortage of HR specialists and managers in the Uzbek market. Employers indicated that the proposed program has a good potential, and the HR profession is in demand in the Central Asian region. The initiative to open the postgraduate course at WIUT has been fully supported by the respondents due to the lack of appropriate course availability at the local and international universities of Uzbekistan.

Project Objectives

TALENT project objectives have had a focus on the development, dissemination and sustainability. The summary of "development" objectives of the project are:

1. To upgrade the skills of the teachers from CA universities in the HRM related courses in terms of HRM research and practice and develop comparative

courses. The partners were to develop syllabi and introductory texts to their courses.

- 2. To establish 6 accredited master programmes in HRM and Talent Development field. At WIUT the master programme is designed to prepare professionals for a career in the field of Human Resource Management [HRM] and Talent Development. Graduates will become proficient in enabling an organisation to align and develop its HRM policies, procedures, and practices to the strategy of the organisation. They will also explore the acquisition, development and sustainability of the Talent within the organisation.
- 3. To make an informal network of EU and CA teachers so that CA teachers delivering similar courses will cooperate in the workgroups and HRM workshops with the EU teachers.

The dissemination and sustainability objectives are:

- 1. To facilitate the interest of the public and inform potential students via the project website illustrating case studies and activities.
- 2. To raise awareness of trade unions, employers, and public organisations on the master programme in HRM and talent development.
- 3. To guarantee the sustainability of each master programme. Each CA university was to prepare a business plan for its HRM master programme.

TALENT project experience before pandemic: Course Development

The partners of the TALENT project designed the curriculum and went through the professional development training with EU coaches. The main responsibility for the EU partners has been to guide development and to monitor the academic quality of the courses. Each EU partner has been specifically responsible for the guidance of two courses in each of the CA universities. The programme of the master course covers specific HRM related courses, supportive and contextual subjects as well as master thesis component.

In conformity with the project requirements and for the sake of developing a common and transparent structure of the master programme the four specific courses (Strategic, Organisational, Regulatory and HR Practice) were developed in the first year of the project. Such a transparent structure produced comparable master programmes in the six CA universities facilitating future exchanges of teachers and students between the universities. The specific courses included the study of the following areas:

1. Strategic aspects

Corporate strategy and strategic HR management (i.e. positioning of organisations; societal importance of HRM), corporate culture; ethics, corporate

accountability; business and corporate strategy; organizational performance; leadership/management styles as they relate to corporate strategy;

2. Organisational issues

Actions in organisations; learning processes of organisations: career/professional development; internal labour market; relation to the external labour market; positions, perceptions, interests, power relationships; organisational change; leadership styles; coaching/mentoring procedures; team building; retention policy; competence management.

3. Regulatory framework

Application of national laws and regulations within the framework of employment relationship; employee representatives; employee engagement, participation and voice; individual and collective dispute resolution; comparative analysis of international and national regulatory approaches.

4. HR practices

Job and competency analysis, job design, recruitment and selection; employer branding and employee value proposition, engagement and retention practice; performance management and appraisal; job evaluation, compensation and benefits management; training and development; coaching and mentoring procedures; stress and wellbeing; redundancy support.

During the general meetings, partners from CA presented the curriculum and discussed the specific, contextual, and supportive courses within the HRM programme. The programme learning outcomes and proposed graduate attributes have been generated and discussed during the meetings of the consortium. The focus of the programme was determined as a blend of theoretically informed and practical approach backed up by work-based learning, research in HRM and Talent development field, looking into the trends globally and locally.

As a part of professional development, TALENT project academic staff took part in mobility to EU universities in February 2020. The aim of the mobility was to work on the design of course reader materials for the syllabus generated by the partner universities. WIUT project team acted as team leaders for each work group of Central Asian partners of the project. WIUT teachers coordinated the activities of the work group starting from syllabus design with the focus on design of the course materials i.e., course readers. The mobility was organized in the following pattern:

Work group 1 "Strategic aspects" visited Athens University of Economics and Business. The aim was to develop course readers for two modules, namely: Strategic Aspects for HR Managers and Comparative Human Resource Management, as well as to undergo a series of seminars for development purposes.

There was a planned visit to one of the biggest banks of Athens – Piraeus Bank, where representatives of the bank presented and shared based practices of the bank's HRM system.

Work group 2 "Organisational Issues" visited the Otto von Guericke University (OvG) Magdeburg. The workgroup participated in a series of seminars on topics such as Human Resource Management in OvG, Visit and Talks at Volkswagen and HRM in the rural district of Stendal. The course readers for Organisational Behaviour and Leadership as well as Work, Organisations and Society were developed.

Work group 3 "Regulatory aspects" had professional development to Sofiya, Institute of Philosophy and Sociology (IPS) at Bulgarian Academy of Sciences. The team completed a training program and drafted course readers on Labor Law and Employee Relations. The team attended several professional development seminars on Employment Relations with representatives of Bulgarian Trade Unions.

Work group 4 "HR Practices" participated in the seminars at Vrije Universiteit Brussel and worked on the design of course readers for Applied HRM and Talent Management courses. There was a series of seminars about the structure and functioning of the department - People and Organization (Mens en Organisatie) of Vrije Universiteit Brussel by Director Raf Devos and Recruitment and Selection by Roland Pepermans.

As a result of the project team mobility, there was a tangible progress on the design of the course readers. Additionally, certificates were awarded to members of the work group by EU coaches for successful termination of this stage of the course development. The participants of the mobility noted that group work and discussions, lectures from EU professors, field trips motivated them for professional development with a desire to implement the activities in the home counties passing the best practices, research and opportunities to students and peers.

TALENT project activities during pandemic time

Among the main challenges during the project implementation was the Coronavirus Pandemic of 2020, and the main challenge is that the task execution took place without face-to face meetings considering the obstacles to mobilities inside the country and between the partner countries, price increase for equipment and difficulty in transportation and logistics.

In March 2020, due to the coronavirus pandemic situation, the TALENT project team at WIUT had to work on the project activities online. WIUT TALENT project team had to participate in two-days meeting with EU coaches virtually via Skype. WIUT team leaders reported on the improvement in the course readers of

each specific work group. EU coaches provided their feedback on the progress. At the end of the virtual meeting, EU coaches and team leaders have mapped a course of actions for further course development.

The team spirit and the bonds that have been established during the one-and-a-half-year project implementation could help to get through the pandemic period. Zoom and MS Teams sessions were held to meet online, discuss, and meet the tasks and deadlines.

As part of the project activities, the business plan and the sustainability of the programme is of a great focus for the partners and stakeholders. The TALENT project team worked out the business and the promotion plan identifying the propositions to offer the master programme to the target audience who want to pursue the career in HRM and talent development field. Below is the example of a unique proposition identified for the master programme at WIUT.

Westminster International University in Tashkent (WIUT) is the first university to provide international accredited degrees in Uzbekistan. WIUT has blended the traditions and standards of British education with culture and environment of Central Asia, and it has been the first university to provide high quality, relevant and at the same time affordable international education in the region.

- WIUT has a stable brand image as the best university among international universities of Uzbekistan. WIUT provides international diplomas which are recognized worldwide. Since WIUT has a direct relationship with their partner University of Westminster (London), their relationship is more open.
- WIUT has a friendly environment. Students actively organize different clubs, events and activities. The atmosphere is so friendly that students prefer to stay in university till the evening.
- WIUT has a comprehensive Learning Resource Centre with a wide range of materials both hard copy and electronic. The Learning Resource Centre has been developed over the last 16 years and has been redesigned a number of times to reflect the changes in the needs and environment for students. It is a contemporary open access environment focusing on the independent learning of students. It has a range of services including a comprehensive student/staff training programme in a range of learning materials, databases, research software and related services.
- MA HRM and Talent Development course focus on employability. The expertise and skills developed during the course can be applied to almost any organisation in any sector. It's a versatile qualification for dealing with talent resourcing, people management, training, development, and general people skills.
- MA in HRM and Talent Development is the 6th postgraduate course that has been opened at WIUT and it has a distinct feature that was done in collaboration with Erasmus + TALENT project partners.

Despite the pandemic, MA in HRM and Talent Development programme started on time at WIUT. MA in HRM and Talent Development was validated in 2019 with the aim of starting delivery in September 2020. WIUT TALENT project team together with the Marketing department have developed a promotion strategy to recruit students for the master programme. It was a major challenge to organize the promotion of the programme at the peak of pandemic. There was an active use of social media (Facebook, LinkedIn, Instagram) pages and advertisements, University website (http://www.wiut.uz/ma-hrmatd), news channels, open days, and presentations. Video about the program was created and it is available on Youtube, the University website and social media (https://www.youtube.com/watch?v=7qHsbCscphg). WIUT marketing team also used -MasterStudies.com and FreeApply.com channels for the promotion purposes. There was also an article about studying at WIUT and Uzbekistan at the MasterStudies.com website.

WIUT launched the MA in HRM and Talent Development programme under the School of Business and Economics, department of Management and Marketing. The department employs a diverse group of academics who can teach a range of modules outlined in the programme. The existing recruitment and selection process ensures to hire the qualified academics with both teaching and industry experience.

In March 2022, there was a planned internal quality audit by the EU partners, which yielded very positive feedback pertaining to the course delivery and project implementation. There were rounds of interviews and focus group discussions with the WIUT administration and teaching staff, Admission office, Career Center, and Learning Resource Center. The partners explored the internal procedures set to sustain the further development and delivery of the programme.

The TALENT project partners also interviewed the master's degree programme's academic staff and students on their feedback and progress in the course. The results of the internal quality audit shall be sent to the European Union (EU) commission on the project implementation status at WIUT. The partners have had positive impressions on the WIUT teaching and learning environment. They commented that WIUT Master's Degree programme meets the TALENT project goals and objectives.

As part of the quality assurance process, the university organizes course committee meetings so that students could provide feedback on teaching and learning as well administrative aspects at the course and university. The students provided positive and encouraging feedback to the programme. Below is the example of two modules: 1) Organizational Behaviour and Leadership and 2) Managing Talent and HRM:

"Lectures in Organizational Behaviour and Leadership are very interesting dynamic and informative. The subject itself is very interesting."

"Managing Talent and HRM practice is very useful at work (for future HR managers) from first lectures, interesting topics and tasks, very detailed and deep knowledge is given in this subject. All information is provided fully, with detailed explanations and examples. The topics are explained clearly."

Best practices of the project

- It is essential to conduct good quality market research and stakeholder analysis and consider the trends prior to the programme launch.
- Capacity building project helped to disseminate the EU best practices and consolidate resources for the programme implementation. The curriculum reflects the international experience of the project team.
- The programme aims and learning outcomes are articulated, teaching, learning and assessment are aligned with the learning outcomes.
- Programme design and curriculum development need to be driven considering the insights from employers, partners and potential students
- Promotion of the course is to be planned and implemented taking into the target audience. Social media, short videos, open days, and master classes are practiced in this case.
- Partner network and cooperative culture is vital in implementation of the project. Therefore, team building events are needed.

Recommendations

- 1. It is important to consider the needs of the partner universities in the curriculum development. The HRM and Talent Development curriculum and material could be enriched with the visits and exploration of the assessment centers which is essential for talent resourcing and talent development.
- 2. The continuous professional development and life-long learning are mandatory. Professional certification courses in HRM and Talent Development could foster the upgrading of the teachers and image of the master programmes. The contact with the Chartered Institute of Personnel and Development could take place.
- 3. Flexibility and agility are necessary in the project activities (i.e. equipment quantity and quality, process of purchase during the force major cases such as pandemic).
- 4. There were some informal misunderstandings due to unequal rates in staff payment rates for participant countries.
- 5. The project team could establish detailed written guidance providing clear information on technicalities such as the specific budget allocation for conference

fees, travel and stay costs considering inflation, hospitality fees such as coffee breaks, publication fee costs.

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II. ИНФОРМАЦИОННО-АНАЛИТИЧЕСКИЙ МАТЕРИАЛ

ДОСТУП К НАУЧНОЙ ИНФОРМАЦИИ И ПУБЛИКАЦИОННАЯ АКТИВНОСТЬ

По материалам VI Национального научно-образовательного форума Рахматуллаев М.А.

Аннотация: Статья включает анализ метериалов ежегодного форума для руководителей министерств и ведомств, вузов, научных центров Академии наук, директоров и ведущих специалистов библиотек, преподавателей, докторантов и главных редакторов издательств Узбекистана. Цель мероприятия - повышение инновационной деятельности, качества научных исследований и публикационной активности в республике путем ознакомления участников форума с мировыми источниками научнообразовательной информации и технологиями создания собственных электронных ресурсов.

Ключевые слова: публикационная активность, цифровые информационные ресурсы, научные исследования, наукометрия.

ACCESS TO SCIENTIFIC INFORMATION AND PUBLICATION ACTIVITY

Based on the materials of the VI National Scientific and Educational Forum Rakhmatullaev M.A.

Abstract: The paper includes the analysis of the annual Forum materials for heads of ministries and departments, universities, scientific centers of the Academy of Sciences, directors and leading specialists of libraries, teachers, doctoral students and editors-in-chief of publishing houses of Uzbekistan. The purpose of the forum is to increase innovation activity, the quality of scientific research and publication activity in the republic by familiarizing the participants with world sources of scientific and educational information and technologies for creating their own digital resources.

Keywords: publication activity, digital information resources, scientific research, scientometrics.

Введение

Одним из важных аспектов повышения рейтинга вузов является активизация публикационной деятельности. Не секрет, что подготовка содержательных научных статей для публикации в престижных научных

журналах списка Scopus и Web of Science требует тщательного анализа состояния исследований в ведущих научных школах по соответствующей научной области. К сожалению, отсутствие опыта и навыков в подготовке статей, а также в навигации в базах данных научных журналов ведущих издательств мира приводит к тому, что молодые исследователи имеют ряд проблем в публикации их трудов и попадают в ловушки в «хищнических» журналов. В связи с этим имеется большая потребность в проведении форумов, конференций, семинаров и мастер классов для докторантов, преподавателей и научных работников ПО разъяснению грамоты публикационной деятельности и использования журналов, имеющих авторитет в научном мире. В 2017 году по инициативе ряда организаций, прежде всего Агентства информации и массовых коммуникаций при Администрации Президента Республики Узбекистан, Национальной библиотеки Узбекистана имени Алишера Навои, Ташкентского университета информационных технологий имени Мухаммада Аль Хорезми, Академии Республики Узбекистан, Министерства высшего специального образования Республики Узбекистан был проведен первый Форум «Доступ к научной информации и публикационная активность». Цель мероприятия - повышение инновационной деятельности, качества научных исследований и публикационной активности в Республике Узбекистан путем ознакомления участников форума с мировыми источниками научнообразовательной информации и технологиями создания собственных электронных ресурсов. Он собрал более пятисот участников из всех регионов республики. Форум оказался настолько эффективным, что было принято решение об ежегодном его проведении. С тех пор на форуме постоянными участниками стали такие ведущие издательства мира, как EBSCO, Springer Nature, ProQuest и другие.

Основные темы и положения форума

Шестой форум прошел в Ташкентском университете информационных технологий имени Мухаммада Аль Хорезми и Национальной библиотеке Узбекистана имени Алишера Навои 29 марта, 2022 г. Форум включен в План научных и научно-технических мероприятий на 2022г. Распоряжения Кабинета Министров Республики Узбекистан №101-F от 07.03.2022г., п.134.

В этот раз наиболее важными темами для обсуждения были выделены:

- Электронные научные ресурсы для инновационной деятельности;
- Актуальные источники электронных научно-образовательных ресурсов ведущих издательств мира и использование их в высших, среднеспециальных учебных заведениях и научных центрах АН Узбекистана;
- Повышение эффективности и качества научных публикаций и диссертаций;

- О национальном доступе научных и образовательных учреждений к ресурсам ведущих издательств и агрегаторов мира на 2022 2023 гг.;
- Комплексная автоматизация информационно-библиотечных учреждений и RFID технологии;
- Наукометрия. Наукометрические инструменты и их развитие в Узбекистане;
- Доступ к научно-образовательным базам данных в условиях пандемии COVID19.

Участники форума отметили:

- 1. Цели и результаты форума отвечают Указам Президента Республики Узбекистан и правительственным решениям:
- УП-6108 от 06.11.2020г. «О мерах по развитию сфер образования и воспитания, и науки в новый период развития Узбекистана»;
- УП-5953 от 02.03.2020г. «О Государственной программе по реализации Стратегий действий по пяти направлениям развития Республики Узбекистан в 2017-2021 годах в «Год развития науки, просвещения и цифровой экономики»»;
- УП-5847 от 08.10.2019г. «Об утверждении Концепции развития системы высшего образования Республики Узбекистан»;
- УП-4947 от 07.02.2017г. «О стратегии действий по дальнейшему развитию Республики Узбекистан» развитие сферы образования, культуры, науки, литературы, искусства и спорта, совершенствование государственной молодежной политики;
- ПП-2909 от 20.04.2017г. «О мерах по дальнейшему развитию системы высшего образования» оснащение высших образовательных учреждений средствами современных информационно-коммуникационных технологий, расширение доступа студентов, преподавателей и молодых исследователей к мировым образовательным ресурсам, электронным каталогам передовой научной литературы и базам данных).
- Концепция развития науки в Республике Узбекистан до 2030 важные года включает пункты: **≪B**) В направлении подготовки высококвалифицированных научных и инженерных кадров и их ориентации деятельность: г) в направлении создания научную современной науки: в направлении формирования инфраструктуры развития д) современной информационной среды, способствующей развитию науки».

Эти планы и правительственные решения будут эффективно реализованы, если обеспечить широкий доступ ученым, специалистам,

студентам и преподавателям к огромным потокам достоверной научной информации и прежде всего к электронным публикациям, которые позволяют оперативно получать знания о новых тенденциях в науке и обществе.

Важность (эффективность) форума, докладов, мастер классов и полученных материалов:

- Руководители министерств, ведомств, вузов и научных центров получили ценную информацию по эффективной организации инновационной и научной деятельности, а также повышении рейтингов вузов, научных центров в свете требований, указанных в Постановлениях Президента, Правительства Республики Узбекистан и международных стандартах;
- Преподаватели, исследователи, докторанты по доступу к мировым электронным научно-образовательным ресурсам и как опубликовать свои научные статьи в высокорейтинговых журналах, а также подготовить диссертационные работы на высоком уровне.
- Сотрудники издательств и информационно-библиотечных учреждений (ИБУ) о многообразии электронных ресурсов и их администрировании, о наукометрических инструментах и роли библиотек в их использовании, о том, как организовать поддержку и обучение пользователей, развивать новые методы и средства информационно-библиотечного обслуживания научных и образовательных учреждений, а также о новых технологических решениях по хранению и использованию научной информации.
- 2. Отмечены положительные тенденции в использовании мировых источников научно-образовательной информации и активизации публикационной активности:

Springer Nature

Общее количество подключенных организаций в 2021 г. 105.

2019 г.: 20 232 скачанных статей, 199 опубликованных статей без соавторства

2020 г.: 79 401 скачанных статей, 286 опубликованных статей без соавторства

2021 г.: 96 633 скачанных статей, 296 опубликованных статей без соавторства

EBSCO Information Services

Общее количество подключенных организаций: 125.

2021 г.: **272716** скачанных статей, количество поисковых запросов - **310007**

Большую роль сыграли регулярно проводимые мастер классы и семинары компании E-LINE Press, представителя компании в Узбекистане. В целом в 2021 г. было проведено 103 семинаров, количество участников 2068 из 113 организаций.

ProQuest Dissertations & Theses Global

Коллективная подписка Национальная библиотека Узбекистана и 14 Информационно-библиотечных центров:

2021 г.: **31860** скачанных диссертаций, количество поисковых запросов - **28592** . Количество проведенных семинаров 40, количество участников 698.

Антиплагиат

Количество организаций (2021) - 43

Количество проверок – 3227

Количество проведенных вебинаров и мастер классов -129.

- 3. Продолжение национальной подписки на базы данных EBSCO Information Services (США) в 2022 г., а также подписка на ресурсы PrqQuest, осуществлённая Национальной библиотекой Узбекистана, позволила 125 образовательным и научным учреждениям получить доступ к ценным научным журналам. Это активизировало как научные исследования, подготовку диссертационных работ, так и публикационную активность в республике. Имеется необходимость в дальнейшем развитии этого опыта.
- 4. Подписка (2020 и 2021), организованная Министерством инновационного развития РУз, на электронные ресурсы Springer Nature, проведенные регулярные семинары (онлайн и офлайн) по работе с базами данных, а также оказание содействия в повышении публикационной активности докторантам, преподавателям и научным сотрудникам, получили большую поддержку вузов и научных центров. Подписчиками телеграмм-группы Springer Nature Uzbekistan являются около 3000 молодых ученых и докторантов республики;
- 5. Предложения, указанные в итоговых документах предыдущих форумов, получили реальное воплощение на практике большинством вузов, научными центрами и издательствами: по материальному стимулированию сотрудников, опубликовавших свои труды в высокорейтинговых научных журналах; по привлечению зарубежных рецензентов в научные журналы, повышению ИХ рейтинга и включения В список международных аналитических систем И баз данных, расширению также пользователей электронных ресурсов и др.;

- 6. В рамках Форума были проведены ряд важных переговоров с руководителями ведущих вузов:
- 1) подписан Меморандум о взаимопонимании между Ташкентским университетом информационных технологий (ТУИТ) и IEEE крупнейшей компанией США, специализирующаяся на новейших ИКТ технологиях;
- 2) проведены презентации по русскоязычным базам данных крупнейшего издательства России ИНФРА-М в Университете общественной безопасности Республики Узбекистан;
- 3) проведена презентация специализированных баз данных по геологии компании EBSCO в Университете геологических наук Республики Узбекистан, также открыт тестовый тестовый доступ на 3 месяца к 7 базам данных EBSCO (GeoRef, Academic Search Complete, GeoRef In Process, Energy & Power Source, eBook Academic Collection, Inspec, OpenDissertations);
- 4) проведена презентация ресурсов IEEE для руководства 7 НИИ технического направления при Академии наук.
- 7. Анализ публикаций за прошлый год показал, что доступ к электронным ресурсам ведущих издательств мира положительно повлиял на публикационную активность в вузах (рис.1). Количество публикаций в научных журналах списка Scopus и Web of Science повысилось в 1.5 2 раза.

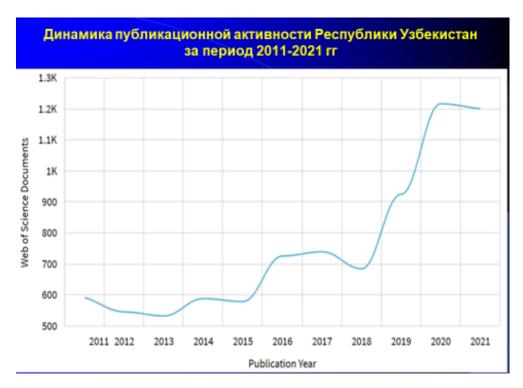


Рис. 1. Рост публикационной активности в высших учебных заведениях и научных центрах Узбекистана.

Наиболее важным результатом явилось повышение публикаций в научных журналах 1 квартиля, т.е. в наиболее престижных журналах, ведущих издательсв мира (Рис. 2).

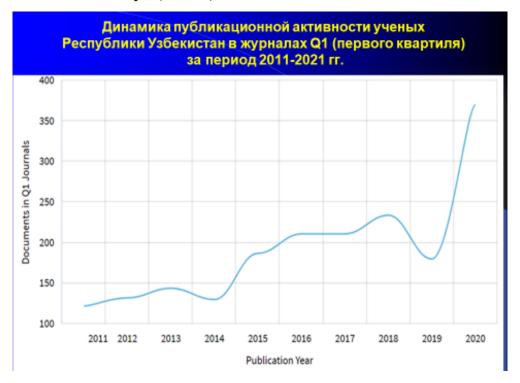


Рис. 2 . Динамика роста публикаций статей в научных журналах списка Web of Science, квартиль Q1.

8. Вместе с тем, имеются ряд проблем и факторов, которые тормозят развитие как научных исследований, издательской деятельности, так и публикационную активность:

- Ряд вузов и научных центров проявляют пассивность в использовании ценных научно-образовательных баз данных, руководство и ИРЦ этих организаций не обращают должного внимания на организацию тренинг курсов по освоению мировых научных электронных ресурсов. Как правило, в этих учреждениях наблюдается также и снижение научной и публикационной активности;
- Большинство национальных научных журналов не удовлетворяет международным требованиям не только по содержанию, но и по формату и оформлению. Остается проблема повышения уровня, престижа национальных научных изданий, учреждений новых научных изданий, включая электронные. Необходимо приведение научных журналов к формату, удовлетворяющим мировым требованиям, для включения их в список баз данных Web of Science и Scopus;

- Несмотря на регулярные мероприятия, тренинги и семинары, проводимые Национальной библиотекой Узбекистана и представителями ведущих издательств, наблюдается низкая осведомленность докторантов, соискателей ученых степеней о мировых информационных ресурсах, методах написания научных статей, требованиях высокорейтинговых зарубежных журналов для авторов, proofreading;
- В последние годы наблюдается существенный рост количества защит диссертационных работ, включая DC, PhD и магистерские в Узбекистане. В то же время имеется острая проблема плагиата в диссертационных работах и научных статьях. Выявлены случаи плагиата, когда вся диссертация или её значительные части списаны с зарубежных научных работ и, в большинстве случаев, ИЗ русскоязычных источников. Участились представления диссертаций на узбекском языке cиспользованием перевода диссертационных работ из Российской государственной библиотеки и других русскоязычных и англоязычных научных коллекций;
- Всего 14 информационно-библиотечных центров (при поддержке Национальной библиотекой Узбекистана) имеют доступ к международной базе данных диссертаций ProQuest Dissertations & Theses Global. Имеется большая потребность в доступе к данной базе для всех вузов и научных центров АН РУз.

Форум рекомендует

Национальной библиотеке Узбекистана:

- проработать вопрос с Республиканским информационнобиблиотечным центром (РИБЦ) и НБУ по подготовке учебных программ и тренинг курсов, сертифицированных тренеров для организации и проведению постоянно действующих тренинг курсов для библиотекарей и пользователей по работе с мировыми базами данных и аналитическими системами, на которые имеются подписки;
- Разработать и утвердить Положение о Консорциуме информационно-библиотечных учреждений с целью: оказания эффективных информационно-библиотечных услуг населению; экономии бюджетных средств на подписку на электронные базы данных научных журналов ведущих издательств мира и др.;
- Организовать совместно с представителем ведущих издательств в Узбекистане семинары и тренинг курсы во всех областных информационно-библиотечных центрах (ИБЦ). Подготовить тренеров в каждом ИБЦ для проведения презентаций в каждой области по прививанию навыков работы с

мировыми информационными ресурсами, электронными базами данных ProQuest, EBSCO Information Services, Springer и др.;

• Рекомендуется расширить подписку на востребованные электронные научно-образовательные ресурсы таких изданий как Wiley, IEEE, Emerald, электронных баз данных научных книг по приоритетным для науки и образования республики темам.

Академии наук и Министерству высшего и среднего специального образования Республики Узбекистан:

- руководству вузов и научных центров АН РУз выделить средства для своих докторантов и соискателей ученых степеней на прохождение тренинг курсов, по работе с базами данных мировых издательств и написанию научных статей и диссертационных работ;
- необходимо решить вопрос выделения необходимых финансовых средств, для приведения форматов научных журналов и статей к уровню международных требований, а также привлечения зарубежных ученых-рецензентов для повышения рейтинга изданий и включения в список международных аналитических систем и баз данных.
- решить финансовые и организационные вопросы по обеспечению доступа к международной базе данных диссертаций ProQuest Dissertations & Theses Global для всех вузов республики и НИИ Академии наук РУз с целью повышения уровня информационного обеспечения научных исследований и качества диссертационных работ;
- с целью повышения рейтингов вузов и научных центров рекомендуется направлять файлы защищенных диссертационных работ для включения в базу данных ProQuest Dissertations & Theses Global;
- с целью повышения качества научных статей и диссертационных работ рекомендуется использование систем обнаружения плагиата (таких как Антиплагиат и др.), в которых реализованы функций поиска переводных заимствований с английского, узбекского, казахского и ряда других языков на русский (и обратно), а также обладающих индексами многочисленных закрытых коллекций диссертационных и научных работ России и стран СНГ, коллекцией СМИ и мировых ресурсов;

Министерству высшего и среднего специального образования и вузам Республики Узбекистан:

•рассмотреть предложение о необходимости введения предметов по обучению студентов магистратуры и докторантуры основам работы с базами данных ведущих издательств мира, наукометрии, грамоте написания научных статей и др. во всех вузах республики. Такой опыт имеется ТУИТ, где в

магистратуре кафедры «Информационно-библиотечные системы» преподают курс «Мировые информационные ресурсы»;

- •ИРЦ вузов обязать проведение регулярных (не менее 2 х часов в неделю) презентаций или мастер классов для обучения докторантов, преподавателей и магистрантов работе с мировыми базами данных, на которые имеется подписка proofreading (написание научных статей);
- создать консорциум ИРЦ вузов, специализирующихся в подготовке кадров в сфере ИКТ для подписки на электронные ресурсы базы данных IEEE, которая включает базы стандартов, электронные книги, научные журналы (списка SCOPUS и WoS) по информационным технологиям. Эти базу имеют важнейшее значение для развитие этой отрасли.
- •Поддержать предложения по развитию наукометрических исследований в Узбекистане для оценки уровня научных публикаций, научных изданий (журналов, книг, учебников и др. научно-методической литературы) в соответствии с международными требованиями и повышения престижа науки республики;
- •Рекомендовать вузам направить на курсы повышения квалификации сотрудников ИРЦ (не менее 2 х человек) в Республиканский информационно-библиотечный центр (РИБЦ) для обучения работе с мировыми информационными ресурсами и аналитическими системами с целью поднятия уровня информационно-библиотечного обслуживания в вузах.

Министерству инновационного развития РУз

• Учитывая большую эффективность и существенный интерес со стороны молодых ученых, докторантов, преподавателей и студентов к базам данных Springer Nature, рекомендуется продлить и расширить подписку на электронные научно-образовательные ресурсы (книги и научные журналы) на 2022-2023 гг.

Выводы. Ежегодный форум еще показал раз важность информационной поддержки научных и образовательных учреждений, предоставления санкционированного доступа к информационным ресурсам ведущих издательств мира, организации тренингов, краткосрочных курсов докторантов, соискателей ученых степеней, обучения ДЛЯ магистрантов по освоению навыков навигации в разнообразных источниках Кроме проведенные прогрессивных знаний. τογο, мастер продемонстрировали большой интерес молодежи к урокам proofreading, получение навыков по написанию научных статей для публикации в высокорейтинговых журналах списка Scopus и Web of Science. Как показали статистика и отзывы участников, Форум имеет важное значение для развития публикационной активности, развития науки и образования в стране.

THE MOST RELEVANT TOPICS FOR FUTURE ERASMUS+ CAPACITY BUILDING IN HIGHER EDUCATION PROJECTS IN CONTEXT OF THE SOCIAL-ECONOMIC DEVELOPMENTS OF UZBEKISTAN FOR 2017-2020

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Abstract: The aim of this material is to present one of the parts of the recent National Impact Study on impact of Erasmus+ projects (2015-2020) on higher education system of Uzbekistan which provides description of the reforms in the field of politics and economics, science and innovations, agriculture and healthcare for the period of 2017-2020. Each author has developed the most relevant 10 topics for the future projects in the context of the respective reforming field to be considered while preparing new project proposals within new Erasmus+ programme phase of 2021-2027. Abdurakhmanova A.K. (Introduction, 1, edition), Astanakulov O.T. (2.1.,2.2.,3.1.), Rikhsieva G.Sh. (2.3.,3.2.), Rakhmatullaev M.A. (2.4.,3.3.), Akhrorov F. B. and Bahadirov K.G. (2.5., 3.4.), Vikhrov I.P. (2.6, 3.5.)

Key words: reforms, modernization, priorities, higher education, science and innovations, agriculture, healthcare.

АКТУАЛЬНАЯ ТЕМАТИКА БУДУЩИХ ПРОЕКТОВ ERASMUS+ ПО ПОВЫШЕНИЮ ПОТЕНЦИАЛА ВЫСШЕГО ОБРАЗОВАНИЯ (СВНЕ) В КОНТЕКСТЕ СОЦИАЛЬНО-ЭКОНОМИЧЕСКОЙ МОДЕРНИЗАЦИИ РЕСПУБЛИКИ УЗБЕКИСТАН 2017-2020 ГОДОВ

Абдурахманова А.К., Астанакулов О.Т., Рихсиева Г.Ш., Рахматуллаев М.А., Ахроров Ф.Б., Бахадиров К.Г., Вихров И.П.

Аннотация: Цель данного материала – представить одну из частей проведенного исследования о влиянии проектов Erasmus+ (2015-2020) на систему высшего образования Узбекистана, в которой дано описание реформ 2017-2020 годов в сфере политики и экономики, высшего образования, науки и инноваций, в сельском хозяйстве и в здравоохранении республики. В заключительной части материала каждым автором в контексте реформ в соответствующей сфере представлены 10 наиболее актуальных тем для проектов Erasmus+ ПО будущих повышению потенциала высшего образования в рамках нового этапа программы на 2021-2027 годы. Абдурахманова А.К. (Введение, 1, редакция), Астанакулов О.Т. (2.1.,2.2.,3.1.), Рихсиева Г.Ш. (2.3., 3.2.), Рахматуллаев М.А. (2.4.,3.3.), Ахроров Ф.Б., Бахадиров К.Г. (2.5.,3.4.), Вихров И.П. (2.6, 3.5.)

Ключевые слова: реформы, модернизация, приоритеты, высшее образование, наука и инновации, сельское хозяйство, здравоохранение.

Introduction

For the last four years $(2017-2020)^{13}$ the internationalisation process has been in particular intensive and became a period of sweeping reforms and important decisions aimed at improving quality of higher education and its organisation in accordance with widely recognised international standards.

The Erasmus+ programme is the largest programme of cooperation not only with European universities but also universities from Central Asia, CIS countries and other regions of the world.

In the framework of the Erasmus + programme, in addition to financing of joint projects for higher education institutions, support has been provided for the National Teams of Experts in Higher Education (Higher Education Reform Experts-HEREs) in cooperation with the Ministries of education in the partner-countries.

The HEREs activities are focused on support to modernization of higher education according to the national policy and its strategy of higher education development of the ministries of education in partner-countries.

The main goal of the national Higher Education Reform Experts' team is to disseminate information about the developments in the country's higher education system as well as transformations in the European Higher Education Area covering 49 countries of the Bologna Process.

The membership of the National team was updated following the proposal of the Ministry of Higher and Secondary Specialised Education, respectively designated by the EU Delegation to Uzbekistan and approved by Executive Agency.

Initiated by the National team the HEREs` annual publication "Perspectives of HE development" has been published as a scientific and methodological collection since 2011. Officially registered as a peer-reviewed scientific and methodological journal "Perspectives of higher education development" its 8th issue was presented at the annual HEREs` conference on 15 December 2020. The aim of the journal is enhancing the efficiency of the education process in Uzbekistan through analysis and information about progressive methods, achievements, tendencies and challenges in the field of higher education. The MHSSE supports this publication, which was stated in regular foreword for each issue. One of the

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¹³ Исследование проводилось в ноябре –декабре 2020 года. Отчет был опубликован на веб-сайте NEO: http://www.erasmusplus.uz/news/Materials-Study-of-the-Impact-of-Erasmus-Projects.htm

strengths of EU HE cooperation programmes is prompt and flexible reaction to the latest developments of higher education.

It is also characterized the activities of the National team similar to activities of CBHE and ICM projects. For example, for 2020 a number of seminars on the most relevant topics for HEIs were organised by the NEO and HEREs with support of the MHSSE and SISQE:

- The main problems faced by the Erasmus+ projects for the pandemic period and recommendations on their solving.
- ECTS
- Online teaching and training.

It is worth to underline that the in overall Tempus and Erasmus+ projects and their participants contributed to capacity building of the Uzbekista HEIs introduction of credit-modular system thanks to projects activities on development of new programmes of updating the existing curricula. Undoubtedly 25-year of cooperation within Tempus, Erasmus Mundus and Erasmus+ with the European universities facilitated ECTS related task to be included into the Concept of HE development until 2030. The HEREs and the project participants were directly involved in development of this Concept. The seminars of HEREs on ECTS were become even more relevant as soon a decision on switching of 35 HEIs to ECTS from 2020/2021 academic year and later on following the Decree on overall introduction of ECTS adopted on 31 December 2020. The seminars were positively evaluated by participants thanks to practically oriented approach and involvement of the participants of on-going projects aimed on development of new ECTS-based curricula, who shared their experience. The most valuable support of the MHSSE and SISOE was appreciated in presenting the detailed information on initiatives and obtained results for the implementation of tasks of the Concept of HE development until 2030.

1. Goals and objectives of the Impact Study

The National impact study of CBHE projects on the development of regions, countries, organizations, and individual higher education professionals, including students was initiated by EACEA in 2020.

The National Erasmus+ Offices are the implementing bodies of the impact studies of CBHE projects and partially ICM projects jointly with members of the National Teams of Higher Education Reform Experts of the respective countries where the NEOs operate. The National Erasmus+ Office in Uzbekistan and the National Team of HEREs designed this study.

Goal of the study: arrange and conduct an interim impact study of the Erasmus+ CBHE and ICM projects in the Republic of Uzbekistan at the national,

institutional and individual levels. In this study, impact is defined as follows: Capacity-building projects are expected to have a long-term structural impact on the systems, organisations/institutions and individuals in Uzbekistan.

Study objectives: 1. To assess the impact of CBHE and ICM projects for 2015-2017 by analyzing monitoring reports and self-reports on the ground; 2. Evaluate the sustainability of the results achieved over the study period, through an independent online survey of project participants; 3. To identify the indirect and long-term impact of projects on the development of project participants, organisations and the region through focus group discussions; 4. To highlight the main problems, challenges and recommendations to be considered for the next period of 2021-2027, taking into account the forecast of development trends in the Republic of Uzbekistan.

Period covered by the impact study: November-December 2020.

2. Reforms and socio-economic modernization of the Republic of Uzbekistan

The reforms and modernization of the Republic of Uzbekistan for the period 2017-2020 by their depth and impact on the socio-economic situation of the country are compatible with all 25 previous years since the declaration of independence in 1991. Reforms have particularly affected a number of aspects of State Construction, Education, Science and Innovation, Agriculture and Health Care.

The scope of the reforms is also highly appreciated by international organizations, including a number of respected experts and the mass media. For example, Uzbekistan became the country of the year according to the British magazine "The Economist". According to the editorial board, the state of affairs in this country became much more democratic in 2019. Positive changes began back in 2018, when President Shavkat Mirziyoyev initiated reforms that "have accelerated over the last year". [https://www.economist.com/leaders/2019/12/21/which-nation-improved-the-most-in-2019].

In this regard, the Higher Education Reform Experts (HERE) together with National Erasmus+ Office in Uzbekistan (NEO) conducted a brief analysis of the ongoing reforms and presented them in the form of analytical notes as part of the National Impact Study.

2.1. Description of the reforms implemented in Uzbekistan in 2017-2020

Large-scale reforms implemented during the years of independence in Uzbekistan laid a solid foundation for national statehood and sovereignty, safety and legal order ensuring, inviolability of state borders, rule of law, human rights and freedoms, interethnic harmony and religious tolerance in society, created

decent living conditions for the population and simplified realization of the creative potential of citizens.

Rejection of the administrative-command management of economy, the phased implementation of market reforms and balanced monetary policy contributed to macroeconomic stability, high rates of economic growth, keeping inflation within the forecasted limits, creating ample opportunities and favorable conditions for the development of small businesses, private entrepreneurship as well as farmerhood.

At the same time, a comprehensive analysis of the country's past stage of development, the changing world economic situation in the context of globalization and increasing competition require the development and implementation of radically new ideas and principles of further sustainable and outrun development of the country.

In 2017, "Action Strategy on Five Priority Lines of Development of the Republic of Uzbekistan in 2017-2021" was adopted, which contributed to the launch of large-scale reforms to reach a new stage of development for almost all sectors and fields of the national economy.

Improvement of the system of State and Social Construction, ensuring the rule of law and further reform of the judiciary establishment, economic development and liberalization, development of the social sector, ensuring security, interethnic harmony and religious tolerance, as well as a reasonable, mutually beneficial and practical foreign policy have become the main priorities of the strategic development of the country. At the same time, the Action Strategy was adopted after a broad discussion among the population and entrepreneurs, scientists and practitioners.

Elections and the new Government of Uzbekistan

On December 4, 2016, early presidential elections were held in Uzbekistan. The elections were deemed valid with more than 87% of voters participating. As a result, the candidate from Liberal Democratic Party of Uzbekistan, Shavkat Mirziyoyev, was elected President of Uzbekistan with 88.61% of the vote.

The election of the new President of Uzbekistan has marked a new stage in the domestic and foreign policy of the state. From the first days of his rule, Shavkat Mirziyoyev headed for intensive dialogue with the people, expanding the participation of citizens in state and public administration, as well as public authorities in solving social and domestic problems of the inhabitants of Uzbekistan.

The new version of the Law of the Republic of Uzbekistan "On Appeals of Physical Persons and Legal Entities" was adopted. At the same time, special attention was paid to improving the forms and types of appeals. In fact, a course was taken to create an information system that would allow, using information and communication technologies, to receive, accumulate, classify and systematize incoming appeals, as well as to monitor and control their complete, timely and qualitative consideration.

Virtual Reception of the President were arranged, as well as each region obtained People's Receptions, where local authorities contribute to the solution of problems and appeals of citizens of Uzbekistan; the procedure for discussion of adopted legal documents was introduced, Information Portals for Public Opinion Research were introduced, Receptions of the Prime Minister were established in all regions to consider appeals of businessmen. In addition, an entirely new institution, the Presidential Commissioner for the Protection of the Rights and Legitimate Interests of Entrepreneurs, or Business Ombudsman, began to function.

Particular attention was paid to the creation of an effective system for eliminating the causes and conditions of corruption in the society, introduction of integrity standards ("Vaccine of Integrity") into the civil service. Work is underway to form an intolerant attitude in the society towards all forms of corruption through development and implementation of comprehensive programs aimed at raising legal awareness and legal culture of citizens. In order to increase the effectiveness of measures taken in these fields, the Anti-Corruption Agency of the Republic of Uzbekistan was established. The staff of this new institution was recruited on a competitive basis, through an open and transparent selection, taking into account the competence of candidates.

Development Strategy 2017-2021.

By the Decree of the President of the Republic of Uzbekistan dated February 7, 2017 "Action Strategy on Five Priority Lines of Development of the Republic of Uzbekistan in 2017-2021" was adopted. This document defines the main priorities and guidelines for further reforming and development of the country in the medium term. The Action Strategy aims to consolidate the efforts of government agencies, non-governmental organizations and civil society institutions to achieve the goals of sustainable development, and identifies five priority lines of development of Uzbekistan:

1. Improvement of State and Society Construction, aimed at further strengthening the role of Parliament and political parties in deepening democratic reforms and modernization of the country, reformation of the Public Administration system, development of organizational and legal framework of civil service, improvement of "E-Government" system, increase in the quality and efficiency of public services, practical implementation of public control mechanisms, strengthening the role of civil society institutions and the mass media;

- 2. Ensuring the rule of law and further reform of the judiciary establishment aimed at strengthening the true independence of the judiciary and guarantees of reliable protection of rights and freedoms of the citizens, improvement of administrative, criminal, civil and economic legislation, increase in the effectiveness of the system of crime counteracting and violations preventing, the full implementation of the adversarial principle in the judicial process, improvement of the system of legal aid and legal services;
- 3. Development and liberalization of the economy, aimed at further strengthening macroeconomic stability and maintaining high rates of economic growth, increasing its competitiveness, modernization and intensive development of agriculture, continuing institutional and structural reforms to reduce the state's presence in the economy, further strengthening the protection of rights and the priority role of private property, stimulating the development of small businesses and private entrepreneurship, comprehensive and balanced socio-economic development of regions, districts and cities, active attraction of foreign investment into economic sectors and regions of the country by improving the investment climate;
- 4. Development of the social sector, aimed at consistently increase in employment and real income of the population, improvement of the system of social protection and health care of citizens, increase in social and political activity of women, implementation of targeted programs for the construction of affordable housing, development and modernization of transportation, engineering, communication and social infrastructure, development of education, culture, science, literature, art and sports, improvement of state youth policy;
- 5. Ensuring security, interethnic harmony and religious tolerance, implementation of balanced, mutually beneficial and constructive foreign policy aimed at strengthening the independence and sovereignty of the state, creation of a belt of security, stability and neighborliness around Uzbekistan, strengthening the international image of the country.

Each of these directions contains specific sections on further deepening reforms and transformations in the country. The implementation of the Action Strategy is envisaged in five stages. Each stage approves a separate annual State Program for its implementation in accordance with the declared year's title in Uzbekistan. Thus, in 2017 the State Program for the implementation of Action Strategy in the "Year of Dialogue with the People and Public Interests" was adopted, in 2018 it was the State Program in the "Year of Support for Active Entrepreneurship, Innovative Ideas and Technologies", in 2019: the State Program in the "Year of Active Investment and Social Development", in 2020: the "Year of Development of Science, Education and Digital Economy". Control over the

implementation of these programs is entrusted to the Government and the Parliament of the country.

Reformation and modernization of the various sectors of life of citizens and the functioning of state bodies of the Republic of Uzbekistan.

In the period 2017-2020, the essence of the main reforms implemented in Uzbekistan was as follows:

- Banking Sector and Money Circulation Reform (2017-2018);
- Unification of exchange rates, liberalization of the foreign exchange market and introduction of conversion on current transactions (summer-autumn 2017);
- Elimination of a number of administrative barriers to cross-border movement of goods and population (primarily with the neighboring countries) and decrease in customs duties (2017-2018);
- Reduction of a number of administrative costs of doing business;
- Implementation of the Concept of administrative reforms (2017-2020);
- Radical Tax Reform (2019);
- Essential improvement of the Human Resources Policy (2019);
- Implementation of the concept of Higher Education System Development in the Republic of Uzbekistan until 2030;
- Complete rejection of forced labor, etc.

The commercialization of the banking sector in Uzbekistan has occurred in recent years. The Central Bank has significantly restructured its activities in terms of control and regulation of commercial banks, regulation of money circulation and foreign exchange market.

In recent years, the Government of Uzbekistan did their best to improve the business environment and reduce transaction costs. It was primarily connected to the reduction of tax, customs and administrative burden, with simplification of procedures of export-import operations and obtaining different kinds of permissions, with improvement of monetary circulation system and banking sector operation.

On January 1, 2019, Uzbekistan launched the Tax Reform that managed to solve many problems (partially or completely). The most important achievements can be considered: a radical reduction of tax on labor (by 1.5-2 times); a significant reduction in the tax burden on enterprises of the general taxation regime (the most important points: reduction of VAT rate from 20 to 15%, elimination of deductions

to the State Trust Funds from revenues -3.2%); a significant reduction of the impact of turnover taxes; task in hand was set to eliminate the huge number of tax benefits and exceptions, leveling tax conditions for all economic entities. At the same time, relatively high costs of tax administration and an overall high level of redistribution of income through the budget and quasi-budgetary funds remain.

For the accelerated innovative development of all sectors of the economy and social sector, there was an urgent need for a single body that could provide strategic forecasting, support and implementation of innovative ideas, developments and technologies, integrating science, education and production. All the above led to the formation of another new institution – the Ministry of Innovative Development of the Republic of Uzbekistan.

The Government of the country also focused on Preschool Education System. Since over the past 20 years, the number of Preschool State Educational Institutions decreased by more than 45%, and the coverage of children by Preschool Institutions in 2016 was about 30% only. The existing material and technical base of Preschool Educational Institutions did not meet modern requirements. The formation of the Ministry of Preschool Education of the Republic of Uzbekistan in 2017 made it possible to begin the practical implementation of a unified state policy in the field of preschool education, creating conditions for the comprehensive intellectual, moral, aesthetic and physical development of preschool aged children.

The role and position of international cooperation

In the field of foreign policy, the new Government of Uzbekistan has held a large number of summit meeting to establish close neighborliness with the countries of Central Asia and the CIS as a whole, that allowed to solve a number of important issues relating to water consumption, borders, the renewal and expansion of transport connection. In addition, the President of Uzbekistan made visits to the United States, France, Germany, Russia, China, South Korea, Turkey and other countries to further develop mutually beneficial cooperation and implement joint projects in social, economic and cultural sectors. Partnership with the UN, OSCE, SCO, OIC and other acknowledged international organizations has reached a qualitatively new stage; also in 2020 Uzbekistan obtained an observer status in the Eurasian Economic Union.

Our Government's prioritized foreign policy, that identified the creation of "Zone of stability, sustainable development and neighborliness" in Central Asia, including Afghanistan, has played a significant role in creation of new spirit of mutual understanding in the Central Asian region.

The adoption of the Tashkent Declaration 2018 has become a decisive contribution of Uzbekistan to the activation of the intra-Afghan peace process. This

document fixed the clear consensus at the regional and global levels on the basic principles of establishing long-term peace and stability in Afghanistan.

Plans, strategies and development trends until 2030

According to the Resolution of the UN General Assembly, adopted at the Summit on Sustainable Development in September 2015, Uzbekistan approved the National Sustainable Development Purpose and Objectives for the period up to 2030.

Over the past three years, fundamental research and practical study of problems at local level have been conducted. As a result, concepts for the development of key sectors and directions of public administration were adopted. In particular, 11 normative legal acts, establishing the main lines of development of the sector until 2030, were adopted. Namely, there were adopted the documents as follows:

- 1. The Concept of Development of the Public Education System of the Republic of Uzbekistan until 2030;
- 2. The Concept of Development of Preschool Education System of the Republic of Uzbekistan until 2030;
- 3. Strategy for the Transition of the Republic of Uzbekistan to the Green Economy for the period 2019-2030;
- 4. The Concept of Development of Higher Education System of the Republic of Uzbekistan until 2030;
- 5. The Strategy of Development of Agriculture of the Republic of Uzbekistan for 2020-2030;
- 6. The Concept of Environmental Protection of the Republic of Uzbekistan until 2030;
- 7. The Concept of Water Management of the Republic of Uzbekistan for 2020-2030;
- 8. The Strategy "Digital Uzbekistan 2030";
- 9. The Concept of Development of the Forestry Management of the Republic of Uzbekistan until 2030;
- 10. The Concept of Development of Science until 2030;
- 11. Strategies of Innovative Development of Agricultural Education System until 2030.

At the same time, the draft Concept of socio-economic development of the Republic of Uzbekistan until 2030 is being discussed by state ministries and departments, scientists and the public. The concept defines and substantiates goals, priorities and tasks of medium-term and long-term socio-economic development of the Republic of Uzbekistan, serving as guidelines for economic policy. At the same time, the main goal of the concept is the formation of an export-oriented market

economy based on knowledge, providing a high level and high quality of life for each citizen of the republic with inclusive and sustainable economic growth.

Conclusion

The reforms implemented in Uzbekistan between 2017 and 2020 have made the country more open and democratic, raising some aspects of economic, political, social, cultural and foreign policy to a new level of development. Efforts and measures taken by the Government of Uzbekistan during the COVID-19 pandemic were especially in time. As a result, the number of those who recovered is 96.6% of the total number of those infected (more than 75,000 people as of December 2020) with coronavirus, and the number of fatal outcomes did not exceed 650 people.

Over the past three years a number of reforms have been implemented to improve the efficiency of public administration, form a sustainable market economy and expand entrepreneurship, improve the social sector, in particular the health care, education and science.

Within the framework of the Concept of administrative reforms in the fields with not clearly organized public administration, 12 new state bodies were established, activities of 20 ministries and agencies were significantly transformed.

Over the past three years more than 30 concepts and strategies for the accelerated development of priority directions of the socio-economic sector in the medium and long term have been adopted.

For the next five years, important tasks were set to ensure high economic growth, improve fiscal policy, develop industrial sector, power industry, transportation, agriculture, housing and utilities.

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2.2. Structural Reforms in Public Administration and the Economy

The Action Strategy on the five priority lines of development of the Republic of Uzbekistan in 2017-2021, adopted in early 2017, triggered large-scale reforms in all sectors of State Construction and Public Administration. Uzbekistan entered a new stage of development, radical renewal and modernization, and these days a new image of the country is in progress.

The final objective of all reforms and transformations is to build a democratic state as well as an equitable society with priority principle: "Human oriented values are above all" which closely resonates with the main principle of the Sustainable Development Objectives "Leave no one behind".

Transformations in the Public Administration system are supposed to help ensure the full implementation of all planned reforms. At the same time, the basic philosophy of reforms in this field is reduced to the principle "It is not the people who must serve the state bodies, but the state bodies must serve the people". To embody this principle, in September 2017 for the first time the most important document was approved: "The Concept of Administrative Reform in the Republic of Uzbekistan".

Improvement in the quality of life of the people and achievement of sustainable rates of economic growth were the fundamental conditions for structural transformations in the economic sector. Measures are being taken to liberalize the economy, introduce market mechanisms, reduce the role of the state and expand the participation of the private sector in the economy, and develop transparent mechanisms of economic management.

Uzbekistan has made significant progress in liberalization of the currency market, improvement in monetary, fiscal and foreign economic activities, as well as creation of favorable investment climate and business environment.

Reforms in the Public Administration system.

The Administrative Reform of the Republic of Uzbekistan gained traction with the publication of Presidential Decree # UP-4947 dated February 7, 2017 "On the Action Strategy for the Further Development of the Republic of Uzbekistan".

In the context of the main directions described by the "Five Actions Strategy" the Decree of the President of the Republic of Uzbekistan dated February 21, 2017 # UP-4966 "On Measures to Radically Improve the Structure and Increase the Efficiency of the Judicial system of the Republic of Uzbekistan" was issued.

This Decree established the Supreme Judicial Council of the Republic of Uzbekistan to assist in ensuring compliance with the constitutional principle of independence of the Judiciary in the Republic of Uzbekistan. Also, the concept and model structure of administrative courts – specialized courts of regional, district and city levels, whose tasks would include the consideration of administrative disputes arising from public relations, as well as cases of administrative offenses, were introduced. Another important change was the transformation from commercial into economic courts. Thus, territorial judicial bodies obtained a clear specialization: economic, administrative, civil, military, and criminal.

The changes set forth in the Presidential Decree dated February 21, 2017 were reflected in the amendments to the Constitution of the Republic of Uzbekistan dated May 31, 2017. The law amended Articles 80, 81, 83, 93, 93, 107, 110, 111, 112 of the Constitution of the Republic of Uzbekistan to reform the country's Judicial system. In accordance with these amendments, the Higher Economic Court and the Supreme Court of the Republic of Uzbekistan were merged into a single supreme judicial authority in the field of civil, criminal, administrative and economic proceedings - the Supreme Court of the Republic of Uzbekistan. As part of these amendments, economic and administrative courts were also established.

In addition, Article 93 of the Constitution of the Republic of Uzbekistan has been amended to establish a new procedure for the election of judges of the Constitutional Court. Members of the Constitutional Court are elected by the Senate of the Oliy Majlis (Parliament of Uzbekistan) from among those recommended by the Supreme Judicial Council, including one representative from the Republic of Karakalpakstan. The powers of the Constitutional Court have also been enlarged [O.Z. Mukhamejanov, I.T. Tulteev – Administrative Reform in the Republic of Uzbekistan: evolution, current status and development prospects // Studia Politologiczne, 2018, vol. 48, – page 141].

In September 2017, Presidential Decree # UP-5185 stated a detailed action plan for Administrative Reform in Uzbekistan.

The concept included a list of specific tasks aimed at solving the problems identified in the text of the Decree.

In terms of improving the institutional, organizational and legal foundations of the activities of public authorities, the following key destinations have been identified:

- Introduction of clear criteria and procedures for the creation and abolition of executive authorities, including territorial subdivisions, in order to prevent an unjustified increase in number of the state employees;
- Optimization of the Executive Authority structure in order to eliminate imbalance between republican and territorial executive authorities and rational distribution of resources between them;
- Increase in the independence and responsibility of the Executive Authority and their head officers for the implementation of Public Policy;
- Further implementation of the "E-Government" system and modern ICTs into the activities of Executive Authority;
- Improvement of public services system (implementation of the "Single-Window" system, development of administrative regulations);
- Development of the system of administrative justice by improving the procedure for appealing the decisions and actions of Executive Authority.

One of the most important points of the Concept of Administrative Reform was the requirement to develop a set of legal acts regulating the civil service. It is difficult to overestimate the importance of this point, since until 2017 in the Republic of Uzbekistan there was no separate law regulating the civil service. The introduction of this task into the Concept enabled the launch of gradual work to create a consistent system for the selection of personnel for the civil service, to ensure transparency in its activities, to increase the labor productivity of civil servants along with the expansion of their social guarantees and an increase in the prestige of the civil service.

At the same time, the process of reforming the civil service system is still incomplete. A draft law "On Civil Service" was submitted for public discussion back in 2017, but yet did not attain its final form. This delay is partially compensated by the multitude of bylaws designed to help solve the problems of training and selecting civil service personnel, but without a systemic law, the process of reforming the civil service system cannot be considered complete.

Among the indicators that characterize the political and legal development of Uzbekistan, a special place belongs to "The Worldwide Governance Indicators", calculating by the World Bank and including indicators of accountability and responsibility of government, political stability, public administration efficiency, quality of public administration, rule of law, as well as control of corruption.

Analyzing the dynamics of the WGI indicators, we can note that the greatest success was achieved by the Republic of Uzbekistan in the field of maintaining the stability of the political system and the efficiency of public administration. This

indicator showed a fairly rapid growth at the turn of 2013-2016. Such dynamics can be explained by the acceleration of Administrative Reform, as well as the active introduction of ICT into the activities of Public Authorities.

Economic reforms

Since the end of 2016, the country began to move toward economic liberalization, building a market economy, ensuring its openness to foreign investors.

By the Decree of the President of the Republic of Uzbekistan # UP-5177 "On the Top-Priority Measures to Liberalize the Foreign Exchange Policy" dated September 2, 2017, it was established that only market mechanisms should be used for fixing the exchange rate of the national currency against foreign currencies.

A key factor in ensuring the effectiveness of economic reforms aimed at improving living standards and creating conditions for sustainable economic growth is the implementation of measures to further reduce the inflation rate.

International experience indicates that in a market economy one of the effective ways of conducting monetary policy is the regime of inflation targeting, in which through the active role of the Central Bank in the monetary market, as well as regular analysis of economic development and broad coverage of Public Policy plans the achievement of the established quantitative objective for inflation is delivered.

On January 1, 2020 the Central Bank of the Republic of Uzbekistan was entrusted to ensure phased transition of the monetary policy mechanisms to the inflation targeting regime, with the inflation rate reduced to 10% in 2021 and the permanent inflation target set at 5% in 2023.

Establishing of the effective budget system is an integral part of the development strategy of market economy in Uzbekistan.

The effectiveness of the economic strategy of the country depends primarily on forming up the fiscal policy that helps maintain financial balance in the country, create incentives for further socio-economic growth, development of entrepreneurship.

On January 1, 2020 a new version of the Tax Code was introduced in Uzbekistan. This document consolidated the simplification of the current tax legislation. Many changes and additions were made to the Tax Code, in particular:

- Social Tax was introduced instead of Single Social Payment;

- Also, Single Tax Payment was changed to Turnover Tax, and Flat Tax to Personal Income Tax. Payers of the new taxes are eligible for the benefits that they enjoyed under the previous taxes;
- Sections on State Fees and Fees for the right to sell certain types of goods were removed from the Tax Code. They will be regulated by a separate law;
- Special tax regimes for markets and agricultural producers were abolished;
- Individual entrepreneurs obtained the right to choose whether to pay Income Tax on the basis of a declaration or a fixed amount of Income Tax.

The changes also affected the Budgetary Policy sector in Uzbekistan. Thus, starting from 2020, the State Budget is adopted in the form of a Law and a system of parliamentary appropriations is introduced. Since then the budget is approved in the context of ministries, thereby increasing their authority and responsibility.

In addition, a mechanism was introduced to increase responsibility in the formation and performance of the local budget, as well as the autonomy of local Councils and public authorities.

A favorable investment climate is a prerequisite for stable high economic development, attracting investment to the regions and industries and activation of entrepreneurship.

Potential investors usually monitor the quality of the investment climate in the country by studying the data of various analytical, research companies and agencies. The World Bank's Doing Business rating is widely known among them.

Uzbekistan ranked 69th in the World Bank's Doing Business 2020 rating among 190 countries, gaining 69.9 points out of 100 at the end of 2019. Thus, compared to the previous rating, the country has risen from the 76th place by 7 positions.

Uzbekistan pays special attention to making a positive image of the country. In June 2020 the Decree of the President of the Republic of Uzbekistan # UP-6003 dated June 2, 2020 "On Improvement of the Position of the Republic of Uzbekistan in International Ratings and Indexes, as well as Introduction of a New Mechanism for Systematic Work with Them in State Bodies and Organizations" came into force. According to this Decree, specialized working groups were created under the Ministry of Finance and the Ministry of Justice of the Republic of Uzbekistan to promote the country's position in international rankings – 14 socio-economic and 5 politico-legal working groups in total.

It should be noted that Uzbekistan has positive changes in the international indexes. One of the most indicative positive trends is the Human Development Index (HDI). The growth of this index indicates a gradual improvement in the

quality of life of the citizens of the country, in particular, an increase in life expectancy, level of education and general well-being of citizens.

Conclusion

Taking into account the above changes in the system of state and public administration of the Republic of Uzbekistan, it is necessary to emphasize the role of the President Shavkat Mirziyoyev as the main reformer and initiator of innovations.

As noted by foreign experts, Mirziyoyev's "courageous policy" based on such principles as: "Human oriented values are above all" and "It is not the people who must serve the state bodies, but the state bodies must serve the people" influenced the regional policy of the Central Asian countries and increased confidence in Uzbekistan not only among neighboring countries, but also among the international community.

In general, according to researchers, the catalyst for change in the system of public administration of the Republic of Uzbekistan is the development and adoption of the "Five Actions Strategy" that broadly covers the most important problems within the country, and provides solutions on the legislative and rational government base.

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2.3. Reforms in Higher Education

In recent years, Uzbekistan has been active in the implementation of strategic objectives for reforming the system of Continuous Education, particularly Higher Education.

Large-scale work is being performed in the country for modernization of Higher Education and Secondary Specialized Education System, to develop science, and to introduce modern forms and technologies of education. Structural and substantive reforms are being performed, affecting all levels and components of the education system that were aimed at ensuring its compliance with the long-term objectives and interests of the country and the requirements of the present.

In particular, an appropriate legal framework for reforming this field was established, determining as a priority the growth of investments and injections to the human capital, training of an educated and intellectually advanced generation, which is the most important value and decisive force in achieving the objectives of democratic development, modernization and renewal, stable and sustainable economic growth.

In order to radically improve the Higher Education System, radically revise the content of training in accordance with the primary objectives of socio-economic development of the country, to provide the necessary conditions for training specialists with Higher Education at the level of international standards, the Decree of the President of the Republic of Uzbekistan # PP-2909 dated April 20, 2017, "On Measures for Further Development of Higher Education System" was adopted. This resolution approved the Program of complex development of Higher Education System for the period of 2017-2021, including many important applications, as well as targeted programs for development of Higher Educational Institutions for the period of 2017-2021. Based on the aforementioned the roadmaps for Higher Educational Institutions on the implementation of this Decree and action programs were developed.

In order to establish effective state control over the quality of education and training, the State Inspectorate for Quality Supervision of Education was established under the Cabinet of Ministers.

On July 27, 2017, the Presidential Decree # PP-3151 "On Measures to Further Expand the Participation of Industries and Sectors of the Economy in Improvement of the Quality of Training of Specialists with Higher Education" was adopted.

Following that, on June 5, 2018, the Presidential Decree # PP-3775 "On Additional Measures to Improve the Quality of Education in Higher Educational

Institutions and Ensure Their Active Participation in the Ongoing Large-Scale Reforms in the Country" was signed.

In accordance with the Presidential Decree # PF-5812 dated September 6, 2019, "On Additional Measures to Further Improve the Secondary Specialized Education System" the fundamental changes were introduced to the Secondary Specialized Education System of the Republic of Uzbekistan.

The Presidential Decree # UP-5847 dated October 8, 2019 "On Approval of the Concept of Higher Education System Development of the Republic of Uzbekistan until 2030" plays an important role in the system of ongoing reforms.

Problems of higher education system described in the Concept

The system of higher education still faces a number of urgent issues and shortfalls with regards to producing highly qualified personnel, in particular:

a) enrollment in higher education and assurance of education quality:

- coverage by higher education is still low;
- the content of existing qualification requirements, curricula and programs is not aimed at the development of practical skills of graduates, and the proportion of non-specific subjects in the curriculum is still high;
- •cooperation between higher educational institutions and customers in the field of personnel training is inefficient, and employers are not involved sufficiently in the development of the content of programs for higher education institutions;
- students do not develop skills such as critical thinking, ability for independent search for information and analytical thinking;
- •hands-on training at enterprises is poorly organized, the qualifications of specialists trained does not meet modern labor market requirements;
- due to the low level of teaching staff's proficiency in foreign languages and information and communication technologies, their professional skills do not comply with the modern requirements;
- there is a shortage of teaching and learning materials, and a significant part of what is available does not meet modern requirements; activities on improving the quality of teaching and learning materials and using foreign literature as complementary or alternative resources are poorly organized;
- the mechanisms for conducting student contests in higher educational institutions are not transparent, and there are no procedures for systemic work with contest winners;

- •there are no mechanisms for selecting students for higher educational institutions from among the talented youth;
- the system of teacher professional development is ineffectively organized, in particular, highly qualified professors and teachers are not involved in conducting training in professional development institutions, and when the trainees are selected for training, their existing potential is not taken into account;
- •it is necessary to further develop activities aimed at improving the content related to ethics and morale, patriotic education of youth based on respect for national values, humanism and high principles, and ensure resilience of young people to the alien ideas and ideologies in higher education;

b) research and innovation:

- the research activities of higher educational institutions do not take into account the plans of social and economic development of the regions; there is no analysis-based forecasting of innovative development;
- there is no efficient practice of introduction of the results of innovation and research, commercialization of scientific developments and involvement of talented youth in research and development; the integration of education, science and industry is weak;
 - the research capacity of higher educational institutions is only 36.4 percent;
- •the average age of faculty members with a degree is 49 years (Doctors of Science are 56 years old, and PhDs and associates are 43 years old on average) and it remains high, with the share of retired doctors of science amounting to 45 percent;
- •research studies are not focused on the actual issues in the social sphere and sectors of the economy;
- •in recent years, the citation rates of articles published in authoritative international scientific journals have been going down;
- there are no effective mechanisms in place to incentivise professors, lecturers, researchers and young scientists involved in research activities;

c) strengthening the infrastructure of higher educational institutions:

- the existing dormitories, libraries, workshops, laboratories, sports and recreational facilities and social facilities do not cover the demand, and many of them do not meet the current technical requirements;
- the higher educational institutions do not have a sufficient number of modern educational and research laboratories; the proportion of educational laboratory equipment that meets international standards is only 10 percent; at the same time,

the teaching process is not adequately supported with laboratory supplies (reagents, chemical glassware, components, biological materials and other supplies);

• the bulk of financial resources of higher educational institutions is spent on wages; the funds allocated on updating educational and research laboratories and maintaining buildings and facilities are inadequate;

d) increasing the attractiveness and competitiveness of the national higher education internationally:

- national higher educational institutions are not included in the first 1,000 positions of the ranking of internationally recognized higher educational institutions, and their official websites are not included in first 1,000 positions in the Webometrics international ranking;
- •educational programs and student knowledge assessment system are not in line with the international standards;
- existing student residences and social infrastructure do not meet the needs of foreign students;
- •the marketing activities, including PR projects (such as Days of Uzbek higher educational institutions, presentations etc.) are not of the adequate quality, and there is no interactive virtual platform in this area;

Strategic Goals and Priority Areas for the Development of Higher Education System

The strategic objectives of the development of the higher education system are as follows:

- improving the quality of training of highly qualified personnel; development of human capital based on labour market requirements aimed at modernization and stable social and economic development of the country;
- creating the necessary preconditions to increase the level of enrolment in higher education; training of highly qualified personnel with the creative and analytical thinking skills, who can independently make decisions in order to fully utilise their intellectual capacity and develop further as a personality, based on the international standards;
- development of a healthy competitive environment; increasing attractiveness and ensuring the competitiveness of the sector internationally.

The development of the higher education system should be based on the following priority areas, taking into account the concrete long-term objectives:

• expanding the higher education coverage and improving the quality of training of specialists with higher education;

- introducing digital technologies and modern methods into the teaching process;
- improving the effectiveness of research in higher educational institutions, ensuring broader involvement of young people in research and developing innovative research infrastructure;
- increasing the effectiveness of activities aimed at developing ethics and morale;
- Actively engaging employers into the process of training highly qualified specialists;
- ensuring financial independence and sustainability of higher educational institutions and strengthening their infrastructure;
- systemic development of higher educational institutions and improvement of their governance;
- combating corruption and introducing efficient mechanisms to ensure transparency;
- increasing investment attractiveness of the higher education system and ensuring its recognition and competitiveness at the international level.

Results for 2020 on the fulfilment of these objectives

In the academic years 2020-2021 the coverage of country's population with Higher Education has significantly increased and reached more than 25% of young people. The basis of this result is the creation of new Higher Educational Institutions, the opening of branches of leading universities in the provinces, the establishment of branches of leading foreign universities in our country. To date, the number of universities and institutes in the country has reached 129. 96 of them are State Higher Education Institutions, 9 are private, and 24 are foreign universities and their branches. Also, the training of personnel by correspondence and evening courses in Higher Educational Institutions is developing in order to provide on-the-job training for students.

The State Inspectorate for Quality Supervision of Education under the Cabinet of Ministers of the Republic of Uzbekistan conducts systematic monitoring to improve the quality of training of specialists in universities, it is reflected in the national rating of universities that covers all the main parameters of the activities of universities to train highly qualified specialists. Since 2017 the results of the rating of universities of the country are announced, which contributed to the creation of competition between universities. And there is also a Department for Supervising the Quality of Education in all Higher Education Institutions that are directly connected to the State Inspectorate.

The roadmaps were developed in all universities for introduction of digital technologies and modern methods in the educational process. To eradicate corruption in Higher Education, the "E-University" system will be gradually introduced, minimizing the human factor in allocation of grades and letting shift paper record books and gradebooks. At the moment, universities are equipped with a database of students, professors and teachers, the system of evaluation of knowledge and other types of work in general is implemented. The "E-University" system is able to provide the transfer of the management system, educational process, libraries and documents circulation into electronic format, to introduce the electronic system of monitoring the effectiveness of the educational process participants.

Ministry of Innovative Development coordinates research and innovation activities, whilst Ministry of Higher and Secondary Specialized Education and the Academy of Sciences of Uzbekistan, using separate roadmaps, conduct their activities for improvement of the effectiveness of research activity in Higher Educational Institutions, the broad involvement of young people in scientific work, the formation of an innovative infrastructure of science. The addition of allocated quotas for doctoral studies, the creation of a system of targeted doctoral studies, the reduction of bureaucratic barriers to thesis defense, the allocation of grants for fundamental, applied and innovative projects for youth, the creation of appropriate conditions for research, encouragement for prescheduled thesis defense and other factors have intensified the involvement of youth in scientific activity. Since 2019, a presidential scholarship for gifted doctoral students has been established. The concept of "University 3.0" that provides for a close connection of education, science, innovation and commercialization of research results in Higher Educational Institutions, is gradually being implemented. To ensure the gradual inclusion of scientific journals of Higher Educational Institutions in Scopus, ScienceDirect and other international scientific and technical databases, a separate platform was created that includes 43 scientific journals of leading universities and research institutes of the country. A system of material incentives was introduced at the expense of extra-budgetary funds for scientists, professors-teachers and young scientific applicants with a high Hirsch index (h-index) indicating the recognition of the results of scientific activity by publishing articles in prestigious scientific journals included in the international database of scientific and technical information. Also, starting from 2020 budgetary funds are allocated to encourage teachers of universities with scientific degree on the basis of assessment of the results of their scientific activity on certain criteria (up to 60% of the salary of a Doctor of Sciences, up to 30% of the salary of Candidate of Sciences and PhD).

To actively involve customers in the process of training highly qualified specialists in the preparation of educational and regulatory documents, qualification requirements, curricula, coordination with potential employers is required. Also,

specialists from customer enterprises are involved in the educational process and scientific activities. An important role in this direction is played by the organization of classes in enterprises and institutions by the areas of activities. Types of practices of students, such as introductory, industrial, pedagogical, research, etc., have expanded.

The important moments for modernization of Higher Education are provision of financial independence and stability of Higher Educational Institutions and strengthening of material and technical support. According to the Decree of the Cabinet of Ministers PKM-967 dated December 3, 2019 "On the Gradual Transition of Higher Educational Institutions to the Self-Financing System", since 2020 10 Higher Educational Institutions of the country have switched to self-financing.

Academic autonomy is gradually being granted to Higher Educational Institutions. Joint programs are created, a number of educational directions and specialties of Master's Degree program are expanded.

The regulatory, legal and educational and methodological basis for the introduction of systems of continuous professional development and retraining for specialists in the social sector and all sectors of the economy, using the possibilities of distance learning in this direction, is being improved.

For instance, the Cabinet of Ministers adopted Decree # 824 dated December 31, 2020 "On Measures to Improve the Organization of the educational process in Higher Educational Institutions".

According to this Decree, starting from the academic year 2020/2021, the educational process in Higher Educational Institutions should be gradually transferred to the credit-module system. The document approved the Regulation on the implementation of the credit-module system in the educational process of Higher Educational Institutions, based on the European system (European Credit Transfer and Accumulation System – ECTS).

In accordance with the decision of the Council of Higher Education Institution:

The faculty staff can train and improve their qualification in prestigious foreign universities and scientific institutions under the condition of registration of an agreement providing for the work in HEI for 3 years;

Teachers have a chance to take part in doctoral programs at prestigious foreign universities and scientific institutions under the condition that they sign an agreement to work at HEI for 5 years.

International cooperation

Increasing the investment attractiveness of the Higher Education System and ensuring its international recognition and competitiveness is one of the most important tasks. In this regard, in recent years active work is in progress. There are great opportunities for integration into the global community, the educational environment and the rapidly changing scientific and innovative life of advanced countries.

Work is underway on inclusion of at least 10 Higher Educational Institutions of the country into the Top 1000 List of Higher Educational Institutions by internationally recognized organizations rating (Quacquarelli Symonds World University Rankings, Times Higher Education or Academic Ranking of World Universities), as well as inclusion the National University of Uzbekistan and Samarkand State University into the Top 500 List with the introduction of modern mechanisms of targeted state financial support for these Higher Educational Institutions. To date, 4 Higher Educational Institutions of the country have been included into the international rating at the regional level.

The recognition of diplomas is an important point in internationalization. Now, if a student graduated from a university that is in the Top 500 List of the world ranking or graduated from a university that Uzbekistan has signed an agreement with, he will get Confirmation Diploma without exams.

The activity of universities in training on the basis of joint educational programs in cooperation with foreign Higher Educational Institutions is expanding. The number of joint scientific conferences, seminars, as well as organizing educational forums, conferences of rectors and other events that contribute to a good exchange of experience heavily increased especially during the pandemic.

In the process of studying and analyzing the educational process the leading foreign universities started the gradual transfer of the educational process in Higher Educational Institutions to the credit-module system. In 2020-2021, 35 Higher Educational Institutions have switched to this system.

Advanced standards of Higher Education are being studied and introduced, in particular the gradual transition from an education system with curricula focused on theoretical knowledge to an education system aimed at building practical skills, based on international experience.

Higher Education reforms in Uzbekistan are being implemented in cooperation with many international organizations, including Erasmus+ (European Union Programme), JICA (Japan International Cooperation Agency), KOICA (Korea International Cooperation Agency). As a result of implemented joint programs hundreds of teachers and students in Uzbekistan have the opportunity to learn international best practices in the education system, to acquire new

knowledge and skills, to improve their skills at leading universities around the world.

Conclusion

According to the analysis of the development of the Higher Education System, we can conclude that public policy of the country started the systematic giving attention on education in general. Since 2017, the regulatory framework has been updated, a new Law "On Education" was adopted, the development concept until 2030 for all stages of lifelong learning has been approved. The development of international relations contributes to the intensive development of Higher Education, since the potential for the implementation of joint educational, scientific, investment projects opens up.

It is important to emphasize the important role of the Erasmus+ Programme, its projects for the development of Higher Education, contributing to the development of internationalization and capacity building of university specialists, improving the learning process, the development of new educational programs and plans, independent thinking of students and other important points of the Higher Education System. In general, the republic is working on implementation of the purpose and objectives of the Concept of Higher Education development until 2030.

2.4. Reforms in the field of Science and Innovation

Science and the introduction of innovative solutions provide a solid foundation for the stable development of the state. Scientific achievements allow countries to follow the path of progress and implement advanced solutions in all sectors of life. In today's rapidly developing economy, no state can stay away from innovation.

Analysis of the state of development of science and technology in Uzbekistan shows that at present there are not yet sufficiently favorable conditions conducive to the development of the scientific potential of universities and research centers, as well as the promotion and implementation into production of innovative developments, from the stage of formation and to entry into market. There is a great need for reforms, development of mechanisms to stimulate scientific research, support scientific youth and implementation of innovative developments.

The President of the Republic of Uzbekistan in his speeches and decrees defined the primary objectives of the country as all-round development of science and education, attracting young people into this sector, active cooperation with developed countries in the field of innovation. This is most clearly highlighted in his Message to Parliament dated January 24, 2020: "... We have set a goal of joining the ranks of developed nations and will be able to achieve it only by

implementing accelerated reforms, relying on science, education and innovation. To do this, we first of all need to educate a new generation of reform-minded people with a strategic vision, deep knowledge and high qualifications."

Strategic aspects of science and innovation development in Uzbekistan

A number of problems that hinder the establishment of effective mechanisms of interaction and strengthen the link between scientific research and production industries are listed in the Presidential Decree # PP-3698 dated May 7, 2018 "On Additional Measures to Improve Mechanisms for Innovation in Economic Sectors":

- First, low and unsatisfactory rates of commercialization of the results of scientific work of Higher Educational Institutions and research of Scientific Research Institutions;
- Second, the lack of mechanisms to stimulate innovative processes, implementation of comprehensive programs of innovative development and innovative activity at the regional and sectoral levels, support for innovative and active business entities;
- Third, the insufficient involvement of representatives of the private sector in innovation activity, including due to their low interest;
- Fourth, the lack of effective measures to improve the efficiency of distribution and rational use of grants within the framework of state scientific and technical programs;
- Fifth, the unsatisfactory level of international cooperation and foreign investment in research and innovation.

Being eager to solve these urgent problems last years the Government has paid more attention to innovation activity, support for knowledge-intensive technologies in industrial production and agriculture, promotion and implementation of advanced developments in production, from the formation stage to market entry. In order to commercialize and introduce domestic scientific and innovative developments into production, innovative technopark "Yashnabad", Advanced Technologies Center under the Ministry of Innovative Development of the Republic of Uzbekistan, as well as other similar organizations under ministries and Higher Educational Institutions were established, contributing to the development of innovative entrepreneurship in the country (Decree of the Cabinet of Ministers of the Republic of Uzbekistan # 721 dated September 11, 2018 "On Measures to Further Support of Innovation"). Significant attention is paid to the development of fields of Information Technology and Telecommunications. The year 2020 was titled "The Year of Development of Science, Education and Digital Economy".

Concept for the development of science until 2030

One of the main documents designed to bring domestic science to a new level is the Law "On Science and Scientific Activities", signed by the President on October 29, 2019. It emphasizes that the priority directions of development of science and technology are developed in order to provide a scientific solution to the problems associated with the achievement of competitiveness and efficiency of the national economy, the creation of new industries, and the improvement of living standards of the population.

In October 2020, the Decree of the President of Uzbekistan # OP-6097 dated October 29, 2020 "On Approval of the Concept of Development of Science until 2030" was adopted. The document comprehensively covers all fields of further improvement of the sector, and also defines a number of important tasks to achieve high economic performance through the implementation of innovative projects. The Concept, its targets and indicators provide for the introduction of a national rating system aimed at assessing the effectiveness of research and innovation activities of scientific organizations, improvement of social partnership between the state and Scientific Institutions through the development of self-management system in science, as well as the implementation of projects within its framework.

It is envisaged to improve the system of financing science and scientific activity, as well as to diversify the sources of funding: increasing 6 times by 2025 and 10 times by 2030 of all funds allocated to science in relation to GDP; bringing the share of funds allocated by the private sector to research and development from the current 8% to 20% by 2025 and to 30% by 2030 in total science funding; creating two venture capital funds in 2021 and ten by 2025 together with leading foreign investment companies to finance innovative developments and startup projects.

An important point of the Concept is the introduction of system of training and professional development of heads of scientific organizations at the Academy of Public Administration under the President of the Republic of Uzbekistan on a permanent basis and the creation of scientific communities in each field of science in order to form and ensure the effective operation of these areas, as well as increasing the responsibility of scientific schools, academic figures and leading scientists in this sector. And the following point has particular importance: the audit of scientific-innovation activity of all state scientific organizations with the involvement of international independent expert companies at the expense of the Fund for Support of Innovative Development and Innovative Ideas. This would enable improving the efficiency of management of scientific centers, programs and projects.

Development of science and innovative technologies in universities

Support of young scientists is among the priorities of Uzbekistan's state policy, as transformations initiated in all sectors, including the Economy, Education, Health, Culture, and Sports, require the most advanced solutions that young people are able to offer. Since Science is one of the most dynamically developing sectors, it is necessary to continuously improve the qualifications of employees of Higher Educational Institutions and Scientific Research Institutions of the republic.

In the Decree of the President of the Republic of Uzbekistan #PP-4391 dated July 11, 2019 "On Measures to Introduce New Management Principles in the System of Higher and Secondary Specialized Education" significant attention is paid to the integration of science, education and production. The Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan has identified as important tasks:

- Optimization of fields of education and specialties, taking into account the development needs of the economy, science and social sector, the organization of internships for students in manufacturing and other enterprises;
- Effective organization of Research Activity in Higher Educational Institutions, wide implementation of research results into practice, commercialization of scientific developments, ensuring close mutual integration of Higher Education, Science and Industry, wide involvement of gifted young people into Research Activity and comprehensive support.
- Expansion and strengthening of international relations, the implementation of joint programs of cooperation of Higher and Secondary Specialized Education, heavy coverage of achievements in the industry at the international level;
- Implementation of measures to modernize the base of educational and scientific laboratories, equipping them with modern equipment.

International scientific cooperation

Globalization directly affects scientific research and Higher Education Institutions by deepening their integration and changing the way they conduct their study. It also creates more opportunities for the academic community. As the experience of the world's leading countries shows, timely investments in science, education, and training are always worthwhile. That is why in recent years the Higher Educational Institutions of Uzbekistan established close cooperation with a number of foreign universities, scientific research institutes and organizations that provide support in introducing advanced teaching methods. Over the past few

years, a number of new branches of major foreign universities and faculties opened jointly with foreign universities and institutes appeared in Uzbekistan; training programs that meet international standards are being actively developed.

In order to develop the scientific and human resource potential of the republic in recent years several branches of leading universities of foreign countries were opened (USA, South Korea, Singapore, Russia, Belarus, etc.). Webster University in Tashkent, AJOU University in Tashkent, INHA, YEOJU, as well as a number of branches of Russian universities. Opening in 2018 a branch of the Federal State Autonomous Educational Institution for Higher Education "National University of Science and Technology 'MISIS' in the city of Almalyk" (the Presidential Decree # PP-3714 dated May 11, 2018) and the establishment of a branch of the Federal State-Funded Educational Institution of Higher Education "Mendeleev University of Chemical Technology of Russia" in the city of Tashkent (the Presidential Decree # PP-4352 dated June 7, 2019) both had particular importance for the development of applied science.

Considering that it is planned to build a nuclear power plant in Uzbekistan, the establishment of a branch of the Federal State Autonomous Educational Institution for Higher Education "National Research Nuclear University "MEPHI" is important not only in terms of training highly qualified personnel, but also the development of scientific research in the field of nuclear physics (Decree of the President of the Republic of Uzbekistan # PP-3875 dated July 20, 2018). And opening of the joint Belarus-Uzbekistan interdisciplinary institute of applied technical qualifications brings hope of increasing in Uzbekistan the attention to training of highly qualified specialists in technical sciences and development of scientific research in this field.

Introduction in 2021 of the Academic Mobility program in order to support and widely involve gifted youth engaged in scientific activities in the regions, as well as to create and enhance the scientific potential of authoritative scientific schools is noteworthy. It is envisaged to allocate grants to stimulate scientific ideas of gifted youth engaged in scientific activities, organization of their short-term internships in foreign universities and scientific centers at the expense of the Gifted Youth Support Fund of the Youth Academy.

Conclusion

In general, there are positive trends in the development of science and innovation activities in Uzbekistan. The above mentioned number of Resolutions of the Government and Decrees of the President of the Republic of Uzbekistan are important for further improvement of the sector; also, they determine a number of important tasks for achievement of high indicators in the field of economy by implementation of innovation projects. The Concept, its targets and indicators

provide for the introduction of a national rating system aimed at assessing the effectiveness of research and innovation activities of scientific organizations, improvement of social partnership between the state and scientific institutions through the development of self-management in science, as well as the implementation of projects within its framework.

The set tasks can be realized upon the following conditions:

- Eradication of corruption in financing of scientific projects by state funds;
- Introduction of effective mechanisms of integration of science, education and industry;
- Creation of real conditions for strengthening international cooperation on joint implementation of scientific and innovation programs and projects;
- Organization and performance of objective audit of scientific-innovation activity of State Scientific Organizations of Uzbekistan with participation of authoritative independent international expert committees.

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2.5. Reforms in Agriculture

In recent years, certain work has been carried out in the direction of reforming the country's main economic sectors. In particular reforms in agricultural area considered improvement public administration system, widely introduction of market relations, strengthening of the legal framework for relations between entities that produce, process and sell agricultural products, attracting of investments into the industry, introduction of resource-saving technologies, providing agricultural producers with modern technology and training, retraining of staff and preparation of graduates in the field. This material provides the review of latest reforms in the country's agriculture sector and agricultural higher education.

Reform and modernisation of the agricultural system of the Republic of Uzbekistan

Since the national independence of Uzbekistan the government has been paying attention to development of the education system, including agriculture. A number of regulations have been adopted in order to address the problems in education regarding the agricultural sector. Agriculture is one of the dominating sectors of the country's economy and developing intensively. Nevertheless, a problem of a lack of qualified agricultural personnel still exists, and there are graduates of agricultural fields trying to find jobs in other fields. The last three-four years can be called a period of unprecedented comprehensive reforms in the agricultural sector, including the introduction of market mechanisms, advanced technologies into the agricultural sector and the implementation of the transition to a cluster production system. The development of agricultural production has become strategic. One of the priority directions of the «Strategy of actions for the further development of the Republic of Uzbekistan", adopted at the beginning of 2017, is the modernisation and intensive development of agriculture. On October 23, 2019, by the Decree of the President, the "Strategy for the Development of Agriculture of the Republic of Uzbekistan for 2020-2030" was approved, which covered nine strategic priorities, the seventh of which was development of science, education, systems of information and consulting services in agriculture.

The most important tasks of the agricultural sector in Uzbekistan today are the guaranteed provision of the population with agricultural products with the rational use of resources and opportunities, the creation of new jobs in the field, further increasing the interest of the rural population in the results of their work, the introduction of advanced approaches. In this regard, the government pays great attention to the modernization and diversification of the economy, including agriculture, food production, financial support for farms, agricultural clusters and cooperatives. This is what 5 laws of the Republic of Uzbekistan and 12 decrees are

aimed at, more than 30 decrees of the President and the government adopted in 2020.

To implement the programme of measures for 2020 to implement the tasks identified in the Strategy for the Development of Agriculture of the Republic of Uzbekistan for 2020–2030, funds from international financial institutions and other foreign organizations were attracted. The experience of countries that are among the top ten in the field of digitalisation in maintaining a unified integration information platform in the agricultural sector is studied. Consistent work is being carried out to introduce digitalisation in agriculture, which is so necessary for the modernisation of specialised research institutes, the introduction of applied research and advanced developments for the further development of the industry.

In recent years, sown areas have been significantly expanded in this direction and the necessary measures have been taken to provide the domestic market with quality products and increase the country's export potential by increasing the volume of food production. Also, practical measures were taken to specialise regions in horticulture, to unite producers of products into horticultural clusters and cooperatives.

Reducing the role of the state and increasing the investment attractiveness of the sector for private investors have become other strategic priorities for the development of agriculture in Uzbekistan. In this regard, it was important to completely abandon government purchases, in addition to the volumes required for the implementation of interventions in cereal crops aimed at ensuring price stability in the domestic market. Measures were implemented aimed at creating food reserves and ensuring macroeconomic stability in the event of a possible threat to the country's food security.

The introduction of market mechanisms into the agricultural sphere, in particular, the system of agricultural clusters, is a priority path on the way of deepening reforms at the sector. There are 97 specialized cotton-textile, 149 fruit and vegetable, 65 grain-growing, 35 rice-growing and 7 - for the cultivation of medicinal plants clusters in the country, as well as 11 cotton-textile cooperatives. Over the past period of this year, almost 11 thousand, or 90 percent, of the country's farms have been transformed into diversified farms, thereby providing employment for about 37 thousand people. About 6.5 million tons of grain, more than 3 million tons of raw cotton, 21 thousand tons of cocoons, 22 million tons of fruits and vegetables, 2.5 million tons of meat and over 11 million tons of dairy products grown in the country in 2020.

The Ministry of Agriculture of Uzbekistan is making considerable effort in establishing close cooperation links between developed countries in the field of agriculture. For instance, on 8 December 2020, an online meeting was held between the Minister of Agriculture Jamshid Khodjaev and the European Union

Commissioner for Agriculture and Rural Development Janusz Wojciechowski, who heads the Directorate General for Agriculture and Rural Development (DG AGRI), they have discussed potential opportunities for future cooperation in the agricultural sector, including issues of regional importance. The Minister Jamshid Khodjayev emphasised that in the next 2 years, as Chairman of the FAO High-Level Governing Body for Europe and Central Asia, he is committed to working with 53 FAO member countries in the Europe and Central Asia region and at the regional level to bring up important issues and problems for joint action. Furthermore, on 11 December 2020 a framework agreement between the Ministry of Agriculture of Uzbekistan and the French company Rungis Semmaris signed on December 9, 2020 online with the support of the Embassy of Uzbekistan in France and the Embassy of France in Uzbekistan. In the framework of the agreement with the Rungis Semmaris, the Ministry of Agriculture plans to implement, in accordance with high international standards, projects to create and manage in Uzbekistan - and in Central Asia - a network of eight large agricultural centres.

Reform and modernisation of the agricultural higher education

The introduction of scientific achievements and innovative technologies into practice requires the solution of such urgent tasks as training personnel with comprehensive modern knowledge, updating their qualifications, and adopting foreign experience. In order to radically improve the quality of higher education in the agricultural sector, to establish cooperation with leading foreign universities, to improve the activities of scientific institutions, several governmental acts and interventions are adopted.

Agricultural higher education is providing at Tashkent State Agrarian University (TSAU) inclusive its branches in Samarkand, Nukus and Termez and Andijan Institute of Agriculture and technologies. These HEIs operate under the Ministry of Agriculture of UZB. The Tashkent Institute of Irrigation and Agricultural Mechanization Engineers operates under The MHSSE and Samarkand Institute of Veterinary Medicine operates under the State Committee of Veterinary and development of animal husbandry. They provide study programmes in the area of agriculture and water issue on the level of Bachelor and Master as well as related post-graduate education (two scientific degrees).

Starting from the 2020–2021 academic year, along with the existing agricultural universities, quotas for admission to bachelor's degrees in agricultural areas were introduced by Gulistan, Bukhara, Karshi, Namangan, Samarkand, Fergana, Urgench state universities. The number of students at agricultural higher education increased by 1.3 fold during 2017-2020 years.

Higher education in Uzbekistan is centrally planned and organised. The quality of higher education is assured by the State Educational Standards which set the minimum requirements for each educational level, describe the main features, structure, content and implementation of curricula, ensure the quality control of personnel training and set the compulsory (core) components (list of academic subjects). The fulfilment of those standards is controlled by the regular (re)accreditation of a study programme which is necessary every 5 years.

Plans, strategies and development trends until 2030

The Strategy for the Development of Agriculture of the Republic of Uzbekistan for 2020–2030 has clearly indicated the main directions of development in the agricultural sector. Priority directions for the implementation of the Strategy are:

- implementation of the state policy on food security, providing for food safety and improvement of the consumer intake, production of food products in the required quantity;
- creation of a favorable agribusiness climate and value added chain, production of agro-food products with high added value competitive on target international markets;
- introduction of mechanisms to reduce the role of the state and increase the investment attractiveness of the industry;
- improvement of the system for ensuring the rational use of natural resources and environmental protection;
- development of modern management systems, providing for the restructuring and further development of the structure of public administration in agriculture;
- increasing efficiency and a redistribution of government spending;
- the development of science, education, a system of information and consulting services, providing for the use of effective forms of dissemination of knowledge and information, integrated with production and research, educational and consulting services in agriculture;
- implementation of programs for the development of rural regions for balanced and sustainable development of rural areas;
- creation of a transparent system of industry statistics, providing for the introduction of reliable methods for collecting, analyzing and disseminating statistical data through the widespread use of modern information technologies.

To ensure the implementation of the Decree of the President of the Republic of Uzbekistan dated July 30, 2020 No. PP-4795 "On measures to further improve the agricultural education system", Government of Uzbekistan developed the

Strategy for innovative development of the agricultural education system until 2030. The strategy provides for the implementation of the following priorities:

- modernization of the agricultural sector, improving the quality of training highly qualified specialists for sustainable socio-economic development, development of human capital in accordance with the requirements of the labor market;
- the use of innovative resource-saving technologies in agriculture, the introduction of "Smart agriculture" and digital technologies;
- development of agricultural production through the implementation of startup projects;
- improvement of the existing mechanism for the integration of education, science and production for the widespread introduction of the results of scientific research, experimental design and technological work;
- training highly qualified, creative and independent decision-making personnel in agriculture on the basis of international standards;
- provide practical assistance to graduates in engaging in agribusiness in order to launch entrepreneurial activity in the field;
- create a competitive environment in agricultural higher education, increase its attractiveness and ensure global competitiveness.

According to the Strategy it is going to be organised joint educational programs with 30 foreign universities. It is expected the new degrees will be developed applying Bologna process principles. Furthermore, measures will be taken to include universities in the system of agricultural education in the list of 1000 prestigious universities in the world (QS rating system). From the 2020/2021 academic year in all areas of training bachelors and masters in this area, a credit-modular education system will be gradually introduced. In order to widen the autonomy of higher education institutions and increase accessibility to higher education it is foreseen transformation of Nukus, Termez and Samarkand branches of the TSAU into independent institutes.

Based on the programs of socio-economic development of the regions and proposals of the job market, by 2030, a personnel training system will be created through the use of innovative resource-saving technologies in agriculture, the introduction of "Smart Agriculture" and digital agricultural technologies. Higher educational institutions will gradually introduce the concept of "University 3.0", which provides a link between the commercialization of the results of education, science, innovation and research in agriculture. Consulting centers, technoparks, start-up centers will be created in universities. The infrastructure and material and

technical base of higher education institutions will be improved and gradually transferred to a self-financing system and financial stability will be ensured. Academic independence of higher educational institutions, including the Nukus, Termez and Samarkand branches of the TSAU, will be ensured.

For the further development of the agricultural sector, the government provides for the implementation of the following projects with support of the European Commission and other international organisations:

- 1. At the expense of EU grants, a Republican agro-service centre will be created in the Tashkent region and a Regional agro-service centre in the Fergana region.
- 2. With the involvement of international experts, the World Bank will allocate \$ 120 million for a radical reform of the activities of 10 research institutes and organizations, equipping them with modern laboratories, equipment and the introduction of a commercialization mechanism. Also, the EU will provide \$ 6 million to 4 research institutes in the framework of the EU horticultural support project. The Concept for the Development of Agricultural Science for 2020-2030 will be developed.
- 3. Starting from the 2020/2021 academic year, joint departments of the TSAU will be created in 7 universities in the regions in the areas of "Fruit growing and viticulture", "Vegetable growing, gardening and potatoes", "Organization and management of greenhouses". Also, on the basis of vocational colleges under the Ministry of Agriculture and the TSAU, colleges of secondary specialized vocational education integrated into the higher education system will be created.

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2.6. Reforms in Health Care System

The importance and role of an effective Health Care System remains a priority for many countries around the world, including the Republic of Uzbekistan,

given the continuing global danger of the COVID-19 pandemic and the impact of increasing environmental and food security concerns in the Central Asian region. A number of policy documents and frameworks, as well as reports from international organizations on health and social well-being issues around the world, have been reviewed to understand these processes. At the heart of measuring the effectiveness of health care systems are the indicators proposed by the United Nations in the field of sustainable development, some of this data will be presented later in this study.

Human Development Index in Uzbekistan

On December 15, 2020, the United Nations Development Program, together with the Government of Sweden, launched the global dissemination of the Human Development Index (HDI) Report 2020, titled: "The Next Frontier: Human Development and the Anthropocene". The Human Development Index Report is a data set of published statistics on three key human development factors - longevity and health, education, and a decent life. In the Report, Uzbekistan ranked 106th among 189 countries with an index value of 0.720 (maximum index value of 1.000), having improved its result from the 2019 report by +2 positions in the ranking and +0.01 index value. Uzbekistan's results according to the Index Report are as follows:

- The Life Expectancy Index, which measures the life expectancy of the population at birth, is 71.7 years (an increase of 0.1 year);
- The Education Index measures the population's average length of education that is 11.8 years (up 0.3 years) and the population's expected length of education, 12.1 years (up 0.09 years);
- The Gross National Income Per Capita Index is \$7,142 (up US \$ 680) in purchasing power parity.

The consistent growth of the HDI in Uzbekistan over the past few years is due, among other things, to the government's attention to public health issues, improvements in the Health Care System, and a focus on effective primary health care and special attention to child and maternal health and well-being.

Despite the challenging times associated with the COVID-19 pandemic, in general the Government of Uzbekistan is coping decently with the consequences of the disease, but at the same time there is an understanding that the HDI for 2021 is likely to be lowered for many countries of the world due to the impact of the pandemic on human health, education and the economy.

Reform and Modernization Strategy for Health Care System for 2017-2021

The Action Strategy on Five Priority Lines of Development of the Republic of Uzbekistan in 2017-2021 was the most important program document that defined the priority directions of state policy in the medium term. In particular, the work on further improvement of the system of medical care and the quality of medical services was continued for the development of the Health Care System for this stated period. These measures included further reforming the Health Care sector (first of all the primary care, ambulance and emergency medical care) aimed at improving the availability and quality of medical and socio-medical services to the population, the formation of a healthy lifestyle of the population, strengthening the basic infrastructure of Medical Institutions. The implementation of comprehensive measures to improve family health, protect mothers and children, increase access of mothers and children to quality medical services, provide them with specialized and high-tech medical care, reduce infant and child mortality was continued. It is important to ensure the reduction of morbidity rates and increase the life expectancy of the population. One of the tasks was the introduction of the "Smart Medicine" system and innovative technologies in Health Care System.

During this period a number of reforms were implemented that resulted in republic's ability to prevent the collapse of the Health Care System caused by the COVID-19 pandemic and a series of natural disasters. Particular attention has been paid to the creation of quality health services for the population in remote rural areas. Until recently, people with health complaints had to travel 10-20, sometimes 50-60 kilometers to district and regional centers to undergo a simple medical examination or receive specialized medical advice. To solve this painful problem, rural medical and nursing stations are being built in remote areas and provided with the necessary specialists and medical equipment.

As a result of optimization of the primary health care, 798 rural family polyclinics were created in 2020. They are equipped with social pharmacies and round-the-clock ambulance service, antenatal clinics and girls' health clinics. The rural population receives specialized outpatient care in five subspecialties (obstetrician-gynecologist, surgeon, dentist, therapist, pediatrician), in addition, ultrasound and laboratory examinations were arranged, thereby providing the rural population with qualified specialized outpatient care. To solve urgent issues in this field, the "Fund for the Development of Emergency Medical Care" was created. Also, during 2017-2019 dozens of centers were created, in particular, a number of branches of Republican specialized scientific and practical medical centers in oncology, neurosurgery, traumatology and orthopedics, allergiology, nephrology and kidney transplantation, neurology, addictology and children surgery. The number of medical centers providing specialized medical care to the country's population has reached 20, their branches are already in operation in the regions.

The COVID-19 situation in the Republic of Uzbekistan

According to the World Health Organization, the number of people in the world infected with coronavirus exceeded 72 million 196 thousand, more than 1 million 630 thousand of them have died (as of 17:51 Central European time on December 16, 2020). In the past 24 hours, 585,455 new cases of coronavirus infection have been identified worldwide, and 11,463 patients have died.

According to current data from Johns Hopkins University (as of 10:28 a.m. Tashkent time on December 17, 2020), more than 74,210,000 people have been infected worldwide, and over 1,648,000 of them have died.

While COVID-19 dartingly spreads around the world, thanks to timely measures taken in the Republic of Uzbekistan, the spread of the virus in the republic has been relatively contained. The establishment of treatment and prevention facilities, quarantine zones, and unparalleled anywhere in the world distribution centers played an important role in this.

As an example, let's consider one of such facilities built through the measures to combat coronavirus – isolation hospital in Zangiata district of Tashkent region. This facility is designed for 4,000 beds. Two complexes were built on an area of 33 hectares. The specifics of treatment of infectious diseases and requirements of modern medicine were taken into account. At admission patients are admitted directly to the ward through an airlock. All buildings and departments are connected by sterile and non-sterile corridors. Intensive care units are equipped with all necessary medical equipment.

In this regard, during the autumn 2020, Uzbekistan was able to stabilize the number of new COVID-19 infectees to an average of 200 cases per day, moreover, the clinics and hospitals previously reequiped to treat patients with this infection returned to their normal activities according to their disease treatment areas.

Medical Education in the Republic of Uzbekistan

Medical Education in the Republic of Uzbekistan is provided in 13 State Universities and their branches, as well as in one Non-State Educational Institution – AKFA University that trains doctors according to the state standard on the basis of international experience.

In 2017-2020, medical and pharmaceutical Higher Educational Institutions in the undergraduate system began training highly qualified personnel in such new educational fields as clinical psychology, biomedical engineering, folk medicine, standardization, certification and quality management of medicines.

Reforms of Higher Medical Education in the country also continue to be performed intensively, as well as other reforms in the Republic of Uzbekistan. In particular, since the academic year 2020/2021 there is supposed to be twice as few non-core subjects in the curricula of Bachelor's, Master's and Clinical Residency programs of higher medical education. Among other things, students of the final year admitted to clinical residency under the target parameters will be trained directly in the medical institutions of the regional level. And the target parameters of admission of Bachelors in "General Medicine", "Pediatric Medicine" and "Professional Education (General Medicine)" will be formed within the framework of admission indicators on the basis of the state grant in the context of regions (cities) based on the need of the regions for the medical profession. Graduates of these fields will have to work for at least 5 years in the regions (cities) specified in the target parameters of admission to the state-financed openings, regardless of their registration at the place of residence. At the same time, for regions with a high demand for medical profession the number of free of state-financed openings at Bachelor's and Master's degree programs will be increase to 50%.

There will be more opportunities for those who prefers to receive Higher Medical Education. Since the academic year 2020/2021, a new medical institute function, where the personnel in the field of public health and sanitary and epidemiological supervision is trained. Branches and clinics of Pirogov Russian National Research Medical University and Bahcesehir University (Turkey) will be opened in the country.

International faculties based on joint educational programs will be created in the country's medical universities, as well as branches in cooperation with reputable foreign Medical Educational Institutions that are included in international rankings.

Since December 2020, Master of Health Care System (Master of Healthcare Administration) major have been introduced at Westminster International University in Tashkent, AKFA University and Medical Educational Institutions.

Also in December 2020 an Agreement was signed that prescribed establishment of the branch of Tashkent State Dental Institute at ADEMA Dental School of the University of the Balearic Islands (Spain). It is notable to see this first branch of a Higher Educational Institution of Uzbekistan that opens in one of the developed European countries.

Strategy for Health Care System development until 2030

The Sustainable Development Goals (SDGs) are sort of call for action outcoming from all countries - poor, rich and of middle-income. This call aims to improve the well-being and protect our planet. States recognize that measures to eradicate poverty must go hand in hand with efforts to increase economic growth and address a range of issues in the field of Education, Health Care, Social

Protection and Employment, as well as Climate Change and Environmental Protection.

The UN Sustainable Development Goals are 17 goals and 169 objectives that all UN member states (193) have agreed to achieve by 2030. Health takes central position being represented in SDG by Goal # 3: "Ensure healthy lives and promote well-being for all at all ages".

In this regard, Uzbekistan has agreed on its national SDGs until 2030; one of these Goals is to drastically improve the health of the population of the Republic of Uzbekistan.

National priorities in the Health Care sector are aimed at improving the quality and efficiency of the Health Care System, including preventive care and the promotion of healthy lifestyle. Particular attention is paid to ensuring access to health services for the most vulnerable segments of the population.

High-quality Health Care services include the full spectrum of care across the life cycle (children, adolescents/youth, women and men), from prevention to treatment and care, with a special focus on communicable and non-communicable diseases. The definition of access is linked to the definition of universal health care coverage.

Reducing the burden of communicable diseases such as HIV/AIDS and tuberculosis is a priority when providing prevention services to vulnerable populations and following internationally recommended protocols.

Between 2017 and 2020, more than 160 legal and regulatory documents were adopted in the field of Health Care. As a result, important changes are taking place in all parts of the Health Care System. From primary health care to specialized centers, new technologies are introduced everywhere, and the achievements of global science and medicine are widely used. These changes are based primarily on the Decree of the President of the Republic of Uzbekistan "On Comprehensive Measures to Radically Improve the Health Care System of the Republic of Uzbekistan" dated December 7, 2018. The Decree also approved the Health Care System Development Concept of the Republic of Uzbekistan for 2019-2025 and the Program of Measures to Implement the Health Care System Development Concept of the Republic of Uzbekistan in 2019-2021.

When working out the Health Care System Development Concept for 2019-2025, the recommendations of WHO experts were taken into account. The Concept covers nearly all fields: improving the legislation and Health Care Financing System, developing the private sector, improving the quality and accessibility of medical care, the gradual introduction of compulsory health insurance, the formation of an effective system of training, retraining and advanced training of

medical personnel, as well as the development of medical science, and the widespread introduction of "E-Health".

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3. Recommendations for future directions of CBHE Erasmus projects

3.1. Recommendations for possible topics in the field of Public Administration and Economy

In the next Erasmus Programme, the most promising topics of interest to Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan will be the following:

- 1. The active involvement of gifted youth in the civil service.
- 2. Broader involvement of women in the civil service, creating conditions for career advancement and professional development.
- 3. Development of cooperation between the state bodies and Higher Educational Institutions in the field of qualified personnel training.
- 4. Study of the experience of European countries in building the capacity of civil servants.
- 5. Improvement of the system of selection and recruitment for the civil service on the basis of best practices of European countries.
- 6. Creation of effective mechanisms for material incentives and motivation of employees.

- 7. Development of an online platform for distance learning of civil servants.
- 8. Problems of poverty reduction.
- 9. Combating corruption of civil servants.
- 10. Buildup a positive image of Uzbekistan and improving its position in international rankings and indices.

3.2. Recommendations for possible topics in Higher Education:

In the next Erasmus Programme, the most promising topics of interest to Ministry of Higher and Secondary Specialized Education of the Republic of Uzbekistan will be the following:

- 11. Implementation of credit-module system into Higher Education.
- 12. Disclosure of scientific and innovative potential of youth.
- 13. Digitalization of Higher Education.
- 14. Ensuring the academic independence and financial stability of Higher Educational Institutions.
- 15. Organization of Double Diploma programmes of education.
- 16. Increasing the investment attractiveness of the Higher Education System, ensuring its international recognition and competitiveness.
- 17. Organization of students' independent work and work with international scientific bases.
- 18. Training of specialists in the field of advanced technologies.
- 19. Modernization of educational programmes and educational literature.
- 20. Development of interdisciplinary programmes in Medicine, Engineering and ICT.
- 21. Internationalization of Higher Education.
- 22. Improvement of the quality of Higher Education, development of a national standard for the quality of education.

3.3. Recommendations for possible topics in Science, Innovation, and Information Technology

In the next Erasmus Programme, the most promising topics of interest to Ministry of Higher and Secondary Specialized Education and Ministry for Development of Information Technologies and Communications of the Republic of Uzbekistan in the field of ICT will be the following:

- 23. Digital Economy of the country.
- 24. Development of information systems of distance learning.
- 25. Access to world electronic scientific and educational resources.
- 26. Training of specialists of the highest qualification in the sector of Artificial Intelligence System for various fields of activity.
- 27. Buildup of effective information infrastructure of the country in order to increase democratization of social development.
- 28. Development of international corporate information networks for the exchange of scientific and educational information.
- 29. Modernization of ICT curricula, both in specialized universities and in every Higher Educational Institution of the republic.
- 30. International cooperation of ICT universities with leading EU scientific schools on implementation of joint scientific and educational programs.
- 31. Development and implementation of information systems for management of educational process based on international standards.
- 32. Development of corporate electronic libraries for operational information support of educational process and scientific activities of Higher Educational Institutions.

3.4. Recommendations for possible topics in Agriculture

In the next Erasmus Programme, the most promising topics of interest to Ministry of Higher and Secondary Specialized Education and Ministry of Agriculture in the field of Agricultural Education will be the following:

- 33. Introduction of credit-module system in Agricultural Education;
- 34. Application of innovative resource-saving technologies in agriculture, the introduction of "Smart Agriculture" and digital technologies;
- 35. Development of business skills of graduates of Agricultural Higher Educational Institutions, development of agricultural production through the implementation of start-up projects;
- 36. Improvement of the existing mechanism of integration of education, science and production;
- 37. Development of human capital in accordance with the requirements of the labor market;
- 38. Implementation of information systems in the organization and control of the educational and management process, the creation of favorable

- conditions for independent learning of students through the introduction of distance learning;
- 39. Identification and elimination of systemic problems in agricultural production through information and advisory centers (counselling centers);
- 40. Development of curricula on medicinal plants, forestry and ecological agriculture.

3.5. Recommendations for possible topics in the field of Health Care and Medicine:

In the next Erasmus Programme, the most promising topics of interest to Ministry of Higher and Secondary Specialized Education and Ministry of Health Care in the field of Medical Education will be the following:

- 41. Implementation of credit-module system in Medical Education;
- 42. Digitalization of Health Care and Medicine;
- 43. Artificial intelligence and big data in Health Care System;
- 44. Bioengineering and genetics;
- 45. Training of specialists in health economics and insurance medicine;
- 46. Modernization of educational programs on public prevention of communicable and non-communicable diseases;
- 47. Interdisciplinary programs in medicine, engineering, ICT and robotics;
- 48. Research of brain disease, population mental health and Personalized Health Care;
- 49. Inclusion in the Global Health Network, taking into account regional specific features;
- 50. Discovery of scientific and innovative potential in the field of Health Care, Pharmaceuticals and so on.

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Концепция журнала и требования к статьям

(К сведению авторов)

ПЕРСПЕКТИВЫ РАЗВИТИЯ ВЫСШЕГО ОБРАЗОВАНИЯ

Научно-методический журнал

Цель журнала: повышение эффективности образовательного процесса путем анализа и информирования о прогрессивных методах, достижениях, тенденциях и проблемах в области высшего образования(BO).

ТЕМАТИКА ЖУРНАЛА

- Современные вызовы для системы высшего образования;
- Инновационные методы и средства в ВО (опыт зарубежных стран, вузов Узбекистана, прогрессивные методы обучения и преподавания, организации учебного процесса и управления вузами, использование ИКТ для инновационного развития ВО, образовательные платформы);
- **Программа Erasmus+.** (задачи программы, опыт успешных проектов Erasmus+ в Узбекистане и за рубежом, отчеты членов команды HEREs по итогам участия в международных семинарах, внедрение принципов Болонского процесса в Узбекистане и др.);
- **Кредитно-модульная система в ВО** (концепции, требования к переходу к кредитно-модульной системе, управление финансами в условиях КС, программы обучения, мобильность преподавателей и студентов, анализ зарубежного опыта, плюсы и минусы КС и др);
- Автономия вузов (экономические, организационные, технические аспекты, опыт ведущих стран, Узбекистана и др.);
- Повышение квалификации, переподготовка кадров в ВО (передовые учебные программы, опыт, методы и средства)
- **Научно-образовательная информация для вузов** (доступ к источникам информации для ВО, наукометрия, статистика использование ресурсов и публикационная активность);
- **Проблемы и перспективы инвестиций в высшее образование** (критерии инвестиций в ВО, опыт зарубежных стран, вузов Узбекистана, управление финансами, эффективность инвестиций, оптимизация использования материальных и кадровых ресурсов в вузах и др.);

ТРЕБОВАНИЯ К ОФОРМЛЕНИЮ СТАТЕЙ

Журнал претендует стать одним из ведущих международных научных журналов по темам развития высшего образования в республике, с последующим увеличением периодичности и тиража, а также включением его в список аналитических систем Scopus и Web of Science.

Соответственно требования к статьям журнала приведены к международным стандартам по оформлению научных статей. Рецензирование выполняется высококвалифицированными учеными и специалистами, включая и зарубежных рецензентов.

Просьба ко всем авторам поддержать журнал своими научными статьями, отвечающими международным нормам и по формату, и по содержанию.

1. Требования к содержанию.

По содержанию статьи должны раскрывать одну или несколько тем разделов выпуска и отвечать основной теме, быть нигде ранее неопубликованными, аналитическими, содержать элементы научной новизны, иметь полезную информацию для развития высшего образования. Рекомендуется придерживаться международной структуры написания статей - IMRAD (Introduction, Methods, Results, and Discussion).

http://science-insight.com/analitika/imrad

2. Требование к оформлению статей:

- 1) «Сведения об авторах» (отдельным файлом на языке оригинала?)
 - ФИО (полностью)
 - Должность и место работы
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 - Ученое звание, ученая степень,
 - Область научных исследований (не более 2-х строк)
 - Электронная почта

2) Статьи привести к стандартной форме, по схеме:

СТРУКТУРА СТАТЬИ:

На языке оригинала:

- Название статьи ПЕЧАТНЫМИ буквами
- ФИО. Фамилия и инициалы (строчными)
- Аннотация
- Ключевые слова
- Текст статьи

• Список литературы

На английском языке:

- Название статьи ПЕЧАТНЫМИ буквами
- ФИО. Фамилия и инициалы (строчными)
- Аннотация
- Ключевые слова

Текст статьи

ФОРМАТ И ОБЪЕМ

- Количество стр. от 10 до 15, интервал 1.0
- Шрифт Times New Roman, 14
- аннотация на языке статьи и аннотация на англ.
- Ключевые слова (от 5 до 7 слов или словосочетаний)
- Поля страниц: верхнее, нижнее, левое, правое 2,5 см
- Нумерация страниц в правом нижнем углу

Требования к аннотации (на языке оригинала и английском)

Аннотация должна представлять собой самостоятельный текст. Аннотация должна быть посвящена статье – проведённому исследованию, а не предмету исследования в целом. Она представляет собой краткое, но информативное резюме статьи и включает характеристику основной темы, проблемы объекта, цели, основные методы, результаты исследования и главные выводы. В аннотации не допускается использование формул, аббревиатур, ссылок на позиции в списке литературы.

Важно! Аннотация пишется одним абзацем объёмом на языке оригинала - 500-600 знаков (около 100 слов), и на английском (около 100 слов). Аннотация на английском языке обязательна!

Требования к списку литературы

Список литературы приводится в алфавитном порядке, со сквозной нумерацией. Ссылки в тексте из списка литературы оформляются в квадратных скобках, например, [12]. Список литературы должен содержать не менее 10 источников. На все позиции списка должна быть ссылка в тексте статьи и наоборот – вся упоминаемая литература должна быть перечислена в списке литературы. При оформлении придерживаться соответствующих стандартов библиографического описания (например, ГОСТ 7.1- 2003 и др).

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