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PROFESSIONAL TA'LIM MUASSASALARIDA ISHLAB CHIQARISH TA'LIMI USTALARINING KASBIY-PEDAGOGIK KOMPETENTLIGINI RIVOJLANTIRISH MAZMUNI

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Annotatsiya: ushbu maqolada professional ta'limda ishlab chiqarish ta'limi ustalarining kasbiy-pedagogik kompetentligini rivojlantirishning ahamiyati, metodologiyasi va amaliy faoliyati keltirilgan. Professional ta'lim tizimida ishlab chiqarish ta'limi ustalari markaziy figuralaridan biri bo'lib, o'quvchilarga samarali ta'lim berishda hamda sifatli ishlab chiqarishni amalga oshirishda muhim rol o'ynaydi. Ishlab chiqarish ta'limi ustalarining kasbiy-pedagogik kompetentligini oshirish o'qituvchining bilimlari, bir tomondan, o'zi o'qitadigan predmetlarga qaratilgan bo'lsa, ikkinchi tomondan, ularni o'zlashtiradigan o'quvchilarga qaratilgan. Kasbiy bilimlarning mazmunini o'zi o'qitadigan predmetni, uning metodikasini, pedagogika va psixologiyani bilishni tashkil etadi.

Kalit so'zlar: kompetentlik, ishlab chiqarish, kasbiy-pedagogik kompetentlik, professional ta'lim, innovatsion ta'lim metodlari.

Аннотация: В данной статье представлены значение, методология и практическая деятельность развития профессионально-педагогической компетентности магистров производственного образования в профессиональном образовании. Магистр производственного образования являются одной из центральных фигур в системе профессионального образования и играют важную роль в эффективном обучении студентов и реализации качественной продукции. Повышая профессионально-педагогическую компетентность магистров производственного образования, с одной стороны, знания учителя фокусируются на предметах, которые он преподает, а с другой стороны, он ориентирован на обучающихся, их осваивающих. Содержанием профессиональных знаний являются знания предмета, его методологии, педагогики и психологии.

Ключевые слова: компетентность, производство, профессионально-педагогическая компетентность, профессиональное образование, инновационные методы обучения.

Abstract: This article presents the meaning, methodology and practical activities of developing professional and pedagogical competence of masters of industrial

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education in vocational education. Master of industrial education is one of the central figures in the system of vocational education and plays an important role in the effective teaching of students and the implementation of high-quality products. By increasing the professional and pedagogical competence of masters of industrial education, on the one hand, the teacher's knowledge is focused on the subjects he teaches, and on the other hand, he is focused on the students who master them. The content of professional knowledge is knowledge of the subject, its methodology, pedagogy and psychology.

Key words: competence, production, professional and pedagogical competence, professional education, innovative teaching methods.

KIRISH

O‘zbekiston Respublikasida professional ta’lim — iqtisodiyotning rivojlanish istiqbollari va ustuvor vazifalarini, zamonaviy texnika va texnologik tendensiyalarni hisobga olib, mehnat bozoridagi kadrlarga bo‘lgan real ehtiyoj, ish beruvchilarning takliflari hamda «Hayot davomida ta’lim olish» prinsipi asosida shaxslarning ta’lim olishiga mo‘ljallangan. Bugungi kunda professional ta’lim muassasalarida ishlab chiqarish ta’limi ustalarining sifatli ta’lim berishi, ayniqsa, ishlab chiqarish ta’limi ustalarining kasbiy-pedagogik kompetentligini oshirish imkoniyatlaridan biri bo‘lib qolmoqda. Ishlab chiqarish ta’limi ustalarining pedagogik va kasbiy tayyorgarligida, balki ta’lim oluvchilar bilan samarali pedagogik aloqani o‘rnatishda ham muhim rol o‘ynaydi. Ishlab chiqarish ta’lim ustalari ish faoliyatida ilmiy, kasbiy-pedagogik bilim hamda ta’lim oluvchilarning ma’naviy va ijtimoiy rivojlanishini ta’minlamoqda. Ishlab chiqarish ta’limi ustalarining kasbiy-pedagogik kompetentligini rivojlantirishda ta’lim jarayonida samarali va innovatsion metodlarni qo‘llash, ta’lim oluvchilar bilan to‘g‘ri muloqot o‘rnatish orqali amalga oshirishdan iborat.

ADABIYOTLAR TAHLILI

Jahon miqyosdagi ta’lim sifatiga qo‘yilayotgan talablardan biri XXI asr pedagogikasini yangi paradigmalar hamda raqamli ta’lim tranformatsiyasi asosida takomillashtirish zaruratini keltirib chiqardi. Chuqur kasbiy bilim, undan unumli foydalanish ko‘nikmalari, shaxsiy tashabbuskorlik, ijodkorlik, mustaqillik har doim pedagog faoliyatini alohida ajratib turgan bo‘lsa, XXI asr pedagogi uzluksiz ta’lim olish, o‘z-o‘zini tarbiyalash va o‘z-o‘zini rivojlantirish, o‘z-o‘zini takomillashtirish qobiliyatlariga ega bo‘lishi lozim. Finlyandiyada Kattalar Ta’limi Tashkiloti (FAEA), Fransiyada “tajriba orqali olingan bilimlarni tasdiqlash” («Validation des Aquis de l’Expérience» (VAE) tushunchasining kiritilishi natijasida norasmiy va

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informal ta’limning me’yoriy-huquqiy bazasi yaratilgan. Germaniyada Weiterbildungspass (Uzluksiz ta’lim pasporti) va ernkultur Kompetenzentwicklung (Kompetensiyalarni rivojlantirishda ta’lim madaniyati) joriy qilingan, Rossiyada “LifelongLearning” (hayot davomida o‘rganish) g‘oyasi malaka oshirish kurslari, qo‘shimcha va to‘ldiruvchi ta’lim dasturlariga tatbiq etilgan.

Uzluksiz ta’lim nazariyasining konseptual holatlaridan farqli o‘laroq, kattalar ta’limi nazariyasi va amaliyoti asosida katta odam tabiatidan kelib chiqqan tamoyillar yotadi: katta yoshdagi odam ehtiyoj sezmaguncha o‘qimaydi, u faqat o‘z fikriga ko‘ra zarur bo‘lgan narsalarni o‘rganadi va ish jarayonida o‘qiydi. Boshqacha qilib aytganda yoshi katta odam ta’lim jarayonida, aniqrog‘i bu jarayonning barcha parametrlari: maqsadlar, mazmun va o‘qitishning tashkiliy shakllarini aniqlashda yetakchi hisoblanadi.

Professional ta’lim — ta’lim oluvchilarda ma’lum bir mutaxassislik va kasblar bo‘yicha kasbiy kompetensiyalarni shakllantiradigan va rivojlantiradigan uzluksiz ta’lim tizimi.

Ishlab chiqarish ta’limi - O‘zbekiston Respublikasida malakali mutaxassislar tayyorlash jarayoni hamda professional ta’limining tarkibiy qismi. Asosiy vazifasi - kelgusida malakali mutaxassis bo‘lib yetishadigan o‘quvchilarni muayyan kasb sohasida bevosita faoliyat ko‘rsatishga tayyorlash, ya’ni bilimlarni amaliyotga tadbiq etishga o‘rgatish, zarur kasb ko‘nikmalari va malakalarini shakllantirishdan iborat. Ishlab chiqarish ta’limini amalga oshirishda nazariy ta’limning ahamiyati katta. Ishlab chiqarish ta’limi 3 asosiy bosqich (o‘quv ustaxonalari, o‘quv maydonlari, o‘quv laboratoriyalari, o‘quv xo‘jaliklaridagi ishlab chiqarish ta’limi; ishlab chiqarish sharoiti — korxona, qurilish, xo‘jaliklardagi ishlab chiqarish ta’limi; ishlab chiqarish tajribasi) ga bo‘linadi. Har bir bosqich o‘ziga xos maqsad va o‘quv jarayonida o‘z o‘rniga ega bo‘lib, kasb xususiyatiga qarab ular turli muddatli bo‘ladi va u ishlab chiqarish ta’limi dasturi bilan belgilanadi.

O‘quvchilarning ishlab chiqarish ta’limi ishlab chiqarish ustasi rahbarligida va o‘quvchilarning unumli mehnati davomida amalga oshiriladi. ishlab chiqarish ta’limi mazmuni muayyan kasbdagi kichik muta-xassislarning mehnat faoliyati hamda malaka darajasini tahlil qilish asosida belgilanadi. O‘quvchilarga ishlab chiqarish ta’limi berishdan asosiy maqsad ularga o‘z kasblari uchun xos bo‘lgan ishlab chiqarish jarayonini rejalashtirish, tayyorlash, amalga oshirish, nazorat qilish, ishlab chiqarish jarayoniga xizmat ko‘rsatishga o‘rgatishdan iborat.

Kompetentlik – ma’lum holat xususida to‘g‘ri mulohaza yuritishga imkon beradigan bilimga ega bo‘lish, dalil-isbotli fikr, kishining muayyan sohada

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saviyasini ifoda etadigan atama. Kompetentlik shaxs xususiyatlari va holatining murakkab majmui bo‘lib, ma’lum sohadagi bilim, ko‘nikma va tajribani mujassamlashtirishi. Kompetentlik insonga muayyan masalalarda fikr bildirish, ma’lum qarorlarni ishlab chiqishda ishtirok etish va o‘zi qaror qabul qilish imkonini beradi. Hozirgi zamon fanida kasbiy komponentlik, ilmiy, boshqaruv, pedagogik, didaktik, metodik, ijtimoiy-psixologik kompetentlikka oid tushunchalar keng qo‘llanadi. Boshqaruvga oid kompetentlik ana shu sohaga taalluqli bilim va ko‘nikmalarning, rahbarlik faoliyatida amaliy tajribaning mavjudligi bilan belgilanadi.

Jahon mehnat bozori talablariga mos keladigan raqobatbardosh kadrlarni tayyorlash oliy ta’lim tizimining eng asosiy funksional xususiyatlaridan biri sanalib, buni samarali amalga oshirilishi mazkur tizimda faoliyat olib borayotgan pedagoglarning kasbiy kompetentligiga bevosita bog‘liqdir. Chunki oliy ta’lim tizimida faoliyat ko‘rsatayotgan pedagog-ustozlar qanchalik mahoratli, bilimdon, malakali va tajribali bo‘lsa, bir so‘z bilan aytganda “o‘z kasbining ustasi” bo‘lsagina, «Yangi O‘zbekistonning taraqqiyot strategiyasi”da belgilangan maqsadlarga erishish jarayoni shunchalik samarali kechishi ta’minlanadi. “Ta’lim to‘g‘risida”gi qonunning 46-moddasida “Pedagog xodimlarning majburiyatlari” sifatida quyidagilar ko‘rsatib o‘tilgan bo‘lib, bular:

T a’lim-tarbiya jarayoni ishtirokchilarining sha’ni, qadr-qimmati va ishchanlik obro‘sini hurmat qilishi;

o‘quv mashg‘ulotlarini sifatli o‘tkazishi;

axborot-kommunikatsiya texnologiyalaridan, o‘qitish va tarbiyaning ilg‘or hamda innovatsion shakllari va usullaridan foydalanishi” pedagoglar kasbiy kompetentligini takomillashtirishning institutsional asosi sifatida xizmat qilib kelmoqda.

Bu borada Prezident Shavkat Mirziyoev ta’kidlaganidek: “Bugun har bir tarbiyachi, oliygoh professor-o‘qituvchilari ta’lim va ilmfan sohasidagi eng so‘nggi ijobiy yangiliklarni o‘quv jarayonlariga tatbiq eta oladigan, chuqur bilim va dunyoqarash egasi, bir so‘z bilan aytganda, zamonamiz va jamiyatimizning eng ilg‘or vakillari bo‘lishlari kerak”

Shu sababli ham “Oliy ta’limni rivojlantirish konsepsiyasi”da belgilangan “oliy ta’lim mazmunini sifat jihatidan yangi bosqichga ko‘tarish, ijtimoiy soha va iqtisodiyot tarmoqlarining barqaror rivojlanishiga munosib hissa qo‘shadigan, mehnat bozorida o‘z o‘rnini topa oladigan yuqori malakali kadrlar tayyorlash tizimini yo‘lga qo‘yish”dek vazifani samarali amalga oshirish ham bevosita oliy

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ta’lim tizimida faoliyat olib borayotgan professor-o‘qituvchilar kasbiy kompetentligining takomillashuviga bog‘liq ekanligini ko‘rsatadi.

O‘zbekiston Respublikasi Prezidentining 2012 yil 10 dekabrdagi “Chet tillarni o‘rganish tizimini yanada takomillashtirish chora-tadbirlari to‘g‘risida”gi PQ- 1875-son qarorida mamlakatda chet tillarga o‘qitishning kompleks tizimi, ya’ni uyg‘un kamol topgan, o‘qimishli, zamonaviy fikrlovchi yosh avlodni shakllantirishga, respublikaning jahon hamjamiyatiga yanada integratsiyalashuviga yo‘naltirilgan tizim yaratilgan. Shu bilan birga, ta’lim standartlari, o‘quv dasturlari va darsliklar zamon talablariga, xususan, ilg‘or axborot va mediatexnologiyalardan foydalanish borasidagi talabga to‘liq javob bermasligi, ta’lim asosan an’anaviy uslublarda olib borilishi ta’kidlab o‘tilgan.

Xususan pedagoglarning faoliyatiga raqamli va axborot texnologiyalarini faol joriy etish, aholiga elektron davlat xizmatlarini ko‘rsatish sifatini oshirish, byurokratik to‘siq va g‘ovlarga yo‘l qo‘ymaslik hamda idoralararo elektron hamkorlikni kengaytirish choralari dolzarb bo‘lib turmoqda. Butun jahon yangi texnologik o‘zgarishlar ostonasida turibdi, uning asosida zamonaviy texnologiyalar, axborot-kommunikatsiya texnologiyalari turganligi hech kimga sir emas. Rivojlangan mamlakatlar tajribasi shuni ko‘rsatmoqdaki, davlat va jamiyat hayotiga zamonaviy texnologiyalarni joriy etilishi mamlakatni qisqa davr ichida rivojlantiradi.

Zamonaviy pedagogik va axborot-kommunikatsiya texnologiyalaridan foydalangan holda o‘qitishning ilg‘or uslublarini joriy etish yo‘li bilan, o‘sib kelayotgan yosh avlodni chet tillarga o‘qitish, shu tillarda erkin so‘zlasha oladigan mutaxassislarni tayyorlash tizimini tubdan takomillashtirish hamda buning negizida, ularning jahon sivilizatsiyasi yutuqlari hamda dunyo axborot resurslaridan keng ko‘lamda foydalanishlari, xalqaro hamkorlik va muloqotni rivojlantirishlari uchun shart-sharoit va imkoniyatlar yaratish”ga qaratilgan. Shuning uchun, ta’lim tizimining barcha bosqichlarida chet tillarni uzluksiz o‘rganishni tashkil qilish, o‘qituvchilar malakasini oshirish xususan, xorijiy til o‘qituvchisi kompetentligini oshirish hamda ta’lim jarayonini zamonaviy o‘quv- uslubiy materiallar bilan ta’minlashni yanada takomillashtirish muhim ahamiyatga ega.

“Kompetentlik” (inglizcha: “competence” “qobiliyat”) faoliyatda nazariy bilimlardan samarali foydalanish, yuqori darajadagi kasbiy malaka, mahorat va iqtidorni namoyon eta olishni ifodalaydi. Har bir pedagog faoliyati davomida olib boradigan ishlarini tartibga solish loyihalash hamda loyihalash madaniyatiga e’tibor qaratish kerak. “Pedagogning loyihalash madaniyati”: pedagog kadrlarni qayta

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tayyorlash va malakasini oshirish kursi talabalarini loyihaviy faoliyatga doir bilimlarini takomillashtirish, pedagogik loyihalash bosqichlari va shakllarini o‘zlashtirishga doir zamonaviy yondashuvlarni o‘zlashtirish, joriy etish, ta’lim amaliyotida qo‘llash ko‘nikma va malakalarini tarkib toptirishdan iborat.

Pedagog kadrlar kasbiy kompetentligini oshirish o‘ziga xos xususiyatlarga ega bo‘lib, kadrlar salohiyati, ta’lim muassasalari moddiy texnika bazasi, mavjud ichki imkoniyat - ishlab chiqarish va ijtimoiy infratuzilma ob’ektlarining mavjudligi va joylashishiga bevosita bog‘liq bo‘ladi. Bu esa, mazkur yo‘nalishni ustuvor rivojlantirishga nisbatan alohida yondashuvini taqozo etadi. “Kompetensiya” so‘zi tarjimada “layoqatli”, “munosib bo‘lmoq” kabi ma’nolarni anglatuvchi lotincha “competere” so‘zi asosida hosil bo‘lgan. “Kompetensiya” deyilganda, shaxsning biror-bir sohadan xabardorlik, shu sohani bilish darajasi tushuniladi.

Murakkab, mashaqqatli, kutilmagan holatlarga boy, ammo jamiyatning zaruriy ehtiyoji hisoblangan ta’lim-tarbiya tizimini yangicha ko‘rinish va yangicha mazmunda amalga oshirish, dars jarayonida innovatsion pedagogik va axborot texnologiyalarni samarali qo‘llash orqali ta’lim samaradorligiga erishish davr talabidir. Ta’lim muassasasi bitiruvchisi o‘z hayotida shaxsiy, ijtimoiy, iqtisodiy va kasbiy munosabatlarga kirishishi, jamiyatda o‘z o‘rnini egallashi, duch keladigan muammolarning yechimini hal etishi, eng muhimi o‘z sohasi, kasbi bo‘yicha raqobatbardosh bo‘lishini ta’minlashda asosan pedagog kadrlar salohiyati hal qiluvchi omil hisoblanadi. Jamiyatdagi barcha yangilanishlarni uyg‘unlashtirish uchun shaxsiy yetuklik bilan birga kasbiy kompetentlik ham muhim ahamiyat kasb etadi.

Professional ta’lim muassasalarida ishlab ciqarish ta’limi ustalarining kasbiy bilim samaradorligini oshirish, dars va ta’lim jarayonini yanada sifatli tashkil etish:

tizimda yuqori malakali pedagoglar kadrlarni tayyorlash, ularning malakasini uzluksiz va sifatli ravishda oshirib borishga;

Ikkinchidan, ta’lim muassasalarida o‘qituvchilar kasbiy qiyinchiliklari va ehtiyojlariga asoslangan uzluksiz sifatli metodik xizmatni tashkil etishga;

Uchinchidan, mavjud fan xonalari, o‘quv laboratoriya asbob-uskunalar, jihozlar va kompyuter texnikasidan, umuman olganda, barcha shart- sharoitlardan samarali foydalanishga;

To‘rtinchidan, sifatli ta’lim-tarbiya jarayonini tashkil etishda, oliy ta’lim muassasalari, malaka oshirish institutlari va umumta’lim maktablari hamkorligida ilg‘or ish tajribalarini amaliyotga joriy etishga;

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Professional ta’lim tizimida faoliyat olib borayotgan o‘qituvchilarning kasbiy kompetentligi va mahoratiga bevosita bog‘liqdir.

Zamonaviy o‘qituvchi o‘zining bilim, ko‘nikma va malakalarini amaliyotda, ya’ni ta’lim-tarbiya jarayonini sifatli tashkil etishda samarali qo‘llay olishi - kasbiy kompetentligining eng asosiy komponentidir. Jumladan:

– dunyo va mamlakatda ta’lim taraqqiyoti bosqichlarini bilishi, xalq ta’limi tizimida o‘quv-tarbiya jarayoni mazmunini ta’minlashga, uzviylik va uzluksizligiga amal qilish;

– kompyuter, axborot kommunikatsiya texnologiyalaridan foydalanish va pedagogik faoliyatida qo‘llay olish ko‘nikmalariga ega bo‘lish;

– talabalarning ruhiy, jismoniy rivojlanishi va yosh xususiyatlari qonuniyatlarini bilishi, ta’lim-tarbiyada pedagogik-psixologik yondashuvga asoslanish;

– o‘quv-tarbiya jarayonini sifatli tashkil etishda darsning aniq bosqichi uchun samarali zamonaviy pedagogik va axborot texnologiyalari hamda metodlarni to‘g‘ri tanlash va qo‘llay olish ko‘nikmasiga ega bo‘lish;

– o‘quv-tarbiya va darsdan tashqari mashg‘ulotlar jarayonida bolalar hayoti va sog‘ligi, texnik hamda axborot xavfsizligini ta’minlashga tayyor bo‘lish;

– dars jarayonida mediaresurslar va elektron tarmoq imkoniyatlaridan samarali foydalanish hamda mediaxavfsizlik me’yorlariga amal qilish;

Pedagoglar umumta’lim fanlarini o‘qitish darsining mazmuniga mediamadaniyat va mediaxavfsizlik tushunchalarini singdirib borishi, ularga axborot texnologiyalarining cheksiz ijobiy imkoniyatlari, afzalliklari bilan bir qatorda salbiy ta’siri va oqibatlaridan o‘zini himoyalash yo‘llarini ham o‘rgatish lozim. Bunda talabalarda axborot bilan ishlash kompetensiyasini quyidagilarni inobatga olgan holda rivojlantirish maqsadga muvofiqdir:

– ta’lim oluvchilarda axborot texnologiyalarining hayot va jamiyatdagi roli, imkoniyatlari va qo‘llash doirasi, shuningdek, uning salbiy oqibatlari va ulardan himoyalanish haqidagi tushunchalarni shakllantirish;

– ta’lim olish va shaxs sifatida rivojlanish jarayonida elektron resurslar, o‘quv dasturlari va boshqa o‘quv-metodik mahsulotlarning afzalliklarini anglash va qo‘llashni o‘rgatish;

– masofadan ma’lumot almashish lokal va global tarmoqda ma’lumot qidirishni va bu jarayonda yuzaga kelishi mumkin bo‘lgan xavf-xatardan saqlanish hamda mediamadaniyat qoidalariga rioya qilish.

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Yoshlarimizda yangi zamonga mos hayotiy mo‘ljallarini belgilashda chalg‘imaslik, axborot makonida o‘zlariga kerakli manzilni aql-idrok, halollik va mehnatsevarlik bilan topish, Vatan taraqqiyoti va yurt faravonligiga o‘z hissasini qo‘shish kabi fazilatlarni tarbiyalash biz pedagoglarning burchidir.

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THE ROLE OF DIGITAL SOFTWARE TOOLS IN PUPILS' CORRECT SPELLING OF PHYSICS TERMS

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Annotatsiya. Ushbu tadqiqotga ko'ra, Garchi Orfo-Qarekeń imlo tekshiruvi o'quvchilarga bitta savolli mashqda imloni yaxshilashda yordam bergan bo'lsa ham, talabalar bir xil imlo xatolarini qilishda davom etishgan. Shunday qilib, Orfo-Qarekeń imlo tekshiruvi yuzaki xatolarni bartaraf etishda yordam berishiga qaramay, ular xatolarni tuzatishning kognitiv darajasiga nisbatan minimal ta'sir ko'rsatadi.
Kalit so'zlar: Orfo-Qarekeń imlo tekshirgich, matn protsessorlari, xatolarni tuzatish, savol, imlo, fizik terminlar.
Аннотация. Согласно этому исследованию, даже несмотря на то, что программа проверки орфографии Orfo-Qarekeń помогла учащимся улучшить правописание при выполнении упражнения из одного вопроса, учащиеся продолжали совершать те же орфографические ошибки. Следовательно, это доказывает, что, хотя программа проверки орфографии Orfo-Qarekeń помогает устранить поверхностные ошибки, она оказывает относительно минимальное влияние на когнитивный уровень исправления ошибок.
Ключевые слова: орфографическая программа Orfo-Qarekeń, текстовые процессоры, исправление ошибок, вопрос, орфография, физические термины.
Annotation: According to this study, even though the Orfo-Qarekeń spell checker assisted the pupils in improving their spelling on a single-question exercise, the pupils continued to make the same spelling mistakes. Consequently, it makes the case that although Orfo-Qarekeń spell checker aid in removing surface errors, they have relatively minimal impact on the cognitive level of error correction.
Key words: Orfo-Qarekeń spell-checker, word processors, error correction, question, spelling, Physical terms.

Introduction. One of the roles of the English Language teacher is to help learners increase their proficiency in the language. This includes the mastery of the five language skills: reading, writing, speaking, listening and “grammaring” [1]. There are many ways in which the English teacher can improve the pupils’

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language proficiency and one of it is by providing feedback; for example, error correction. Error correction can be defined as any sort of feedback by a language teacher to correct error in the target language by learners [2] and is an important component that will contribute to the pupils' success as language users. For the purpose of this study, I will focus on error correction in one skill area which is writing.

Literature Review. There is a lot of research and debate on the effectiveness of error correction and its contribution to the improvement and development of writing accuracy [3]. Despite this, providing feedback is important because of the important role it plays in guiding and helping learners improve their proficiency in the English language. The emergence of word processors with spell-checkers has helped a lot in writing and processing word documents. Spell-checker is a function which automatically highlights a spelling mistake or error and suggests possible spelling correction to users of word processors. Based on definitions of different types of error correction provided by [4], spellchecker can be categorised as an explicit error correction. Research shows that spell-checkers have helped a great deal in reducing surface-level errors such as spelling and punctuation [5]. In a study by [6], children using spell-checkers corrected 32% more errors than children using dictionaries. This is due to the flagging of errors by the tool, thus helping users to notice errors or mistakes easier. According to [7], there were nine studies between 1984 and 2010 on the use of spell-checkers in writing by learners with learning and academic disabilities. However, in all these studies, the spell-checker was perceived as a tool for editing and revising writing, not as a medium of corrective feedback.

The figure 1 below shows the different types of error correction for spoken and written language as listed by [4] and [8]. Spell-checkers and grammar checkers, although widely used and are highly encouraged for revising and editing written works, belong to neither spoken error correction nor written error correction. The nature of error correction is bound by the communicative approach in Computer-Assisted Language Learning (CALL), therefore is it not stagnant like written error correction but not integrative like the spoken error correction. One thing sets spell checkers apart from the list that the authors made; it is done not by the teacher, but by a software. Therefore, while the teacher may decide what error to correct (or ask the learner to correct), the spell checker does not differentiate. It highlights all the mistakes and – in most cases – offers a solution. By referring to

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definitions of the different types of error corrections provided by [4] and [8], it can be deduced that spell-checker is a type of explicit error correction.

Recent studies show that spell-checkers help reduce pupils' surface errors in writing by flagging spelling errors and giving correct spelling suggestions. This study investigates if the error correction provided by the spell-checker tool in word processors are internalized by pupils. A quasiexperimental two-group study was conducted on 30 Form 1 pupils in a school in Kuching, Sarawak. The learners were given dictations which contained words listed as commonly misspelled words according to Oxford University Press (2012). The experimental group were given three dictationsone in which they used word processors and allowed to use the spell-checker tool and the control group was given two dictations, both handwritten. The data gathered were analysed using a software for statistical analysis. This study found that, while the spell-checker helped the learners revise their spelling on one dictation exercise, learners still made the same errors in their spelling after the use of spell-checkers. Therefore it argues that while spell-checkers help eliminate surface errors, they have very little influence on correcting the errors on the cognitive level [9].

According to recent research, spell checkers can help pupils write less by pointing out spelling mistakes and suggesting better words. This study looks into whether or not pupils internalize the physics error correction offered by word processors' Orfo-Qarekeń spell-checkers. Pupils from two groups participating in a quasi-experimental study at schools located in the city of Nukus in Karakalpakstan participated. The learners were given questions in physics that contained words listed as commonly misspelled words. The experimental groups were given seven questions in physics in Karakalpak, in which they used word processors and were allowed to use the spell-checker tool. The collected data were examined using statistical analysis tools [10].

Research methodology. Language learners from Karakalpak schools participated in two groups of physics pupils using a quasi-experimental method. The experimental group (n = 9) and the control group (n = 10) were the two groups. The number of pupils present for each of the question sessions set up for their groups is represented by the number of samples listed here.

The learners used spell-checkers to check their work on a typewritten control assignment to assess their spelling faults. The experimental group received three questions, the first of which was handwritten, while the control group received two handwritten questions. The third question was handwritten as well as typed using a

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word processor. Pupils were given ample time to review their answers and make any adjustments for each question. The dependent variable in the post-test is the quantity of rectified items. The identical text was utilized in each and every question.

When the control work was over, learners were asked to review their work individually to also give them time to be sure of their spelling. They are given as long as they need, until they are convinced that there are no more corrections to be made. This is to eliminate any possibilities of lexical errors or spelling mistakes, leaving the answer sheet with only spelling error. In case of typewritten control work, pupils were asked to revise their typewritten test again using the
spelling checker. Although the spelling-checker was set to flag errors ad-hoc, participants are still asked to do it manually to eliminate all possibilities of the spelling checkers malfunctioning or wrongly set. All the pupils' work on the computers were saved and printed out. These are then, analysed.

Five sets of questions comprised the control task that was assigned to the pupils. For this study, each of these five sets of questions is examined. The control task has no time limit, and pupils are free to ask the test administrator questions in order to get clarification on any unclear texts.

Analysis and results. The pupils in this sample are all from different school groups, the majority of which are from Nukus. It is anticipated that pupils already possess a strong grasp of physics and are less prone to making mistakes. Since this study solely looks at spelling errors in physics books, these pupils were also chosen on the presumption that they had a high degree of Karakalpak language ability. This helped to rule out any potential lexical or grammatical problems.

The results of this study indicate that learners most commonly make mistakes related to letter replacement and omission.

Table 1.

The frequencies of spelling mistakes by category

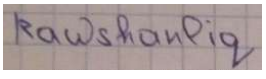
Correct spelling of physical terms	Error types (number of pupils)	Total number of pupils

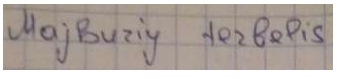
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Májbúriy terbelis	Majburey tebrenis (1)	Májbúrıy terbelis (1)	Majbúriy terbelis (1)	Májburıy terbelis (2)	Majburiy terbelis (7)	Majburıy terbelis (1)	19
Kóndeleń tolqın	Kóldeleń tolqın (2)	Kundeleń tolqın (1)	Kondeleń tolqin (5)	Kondeleń tolqın (1)			
Ráwshanlıq	Rawshanlıq (9)	Rawshanliq (3)	Rausha nliq (1)	Rawshań liq (1)			
Ilgerilemeli háreket	Ilgerlemeli háreket (6)	Ilgerleme háreket (2)	Ilgerilemeli hareket (2)	Ilgerilieme háreket (1)	Ilgerileme hareket (1)		
Jaqtırtılǵanlıq	Jaqtırtılganlik (1)	Jaqtirtilǵanlıq (2)	Jaqtırtqanlıq (1)	Jaqtirtqılǵanlıq (1)	Jaqtirtirganliq (2)	Jaqtirtirilǵanliq (1)	
Quwatlılıq	Quwatlaw (1)	Quwatliliq(1)	Quwatlıq (1)	Quwatlılıq (1)	Quwwatliliq (1)		
Aylanbalı háreket	Aylanbalı hareket (3)	Aylanbali hareket (4)	Aylanbali háreket (2)				

In this survey, the terms "Ráwshanlıq" and "Májbúriy terbelis" is the most often misspelled word, occurring in 13 out of 19 samples. The words "Ilgerilemeli háreket" and "Kóndeleń tolqın" come after it. The majority of pupil errors involving "Kóndeleń tolqın" are caused by improper usage of distance.

We also need to recognize that the Orfo-Qarekeń checker has a big influence on children's spelling. Learners will use the Orfo-Qarekeń checker if they are truly struggling with a word's spelling. Figure 3 displays multiple instances of the Orfo-Qarekeń checking effect on the pupils' spelling.





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Figure 1. Orfo-Qarekeń checker influence on Pupils' Spelling

The results of the experimental group's pre-test and treatment show a significant difference, which is consistent with other research on the use of spell checkers as a tool for editing and revising written material. The results of this study demonstrate that spellcheckers are effective in removing the majority of spelling mistakes that pupils make in their writing. The desk The control work scores' means and standard deviations are shown below. 35 is the highest possible score (all correct).

Table 2: Means and Standard Deviations of Dictation Scores

		Pre-test		Treatment		Post-Test	
Group	**N**	**M**	**SD**	**M**	**SD**	**M**	**SD**
Experimental	14	22.857	7.04	28.286	8.21	25.214	6.716
Control	16	24.188	7.60	-	-	24.500	6.16

It is clear from the analysis of the data that spell-checkers have no effect on pupils' capacity to correct their own spelling mistakes. This is due to the fact that the experimental group's pre- and post-test results did not differ significantly, according to the results. The results also revealed that, despite some improvements in the experimental group's performance following the treatment, there are no appreciable variations between the post-test results between the experimental group and the control group.

Using spell-checkers requires pupils to at least have a rudimentary understanding of word spelling, as the tool provides suggestions depending on the pupil's spelling. Let's examine the sample from the treatment test that was given to the experimental group below. But take note of the recommended spelling.The Orfo-Qarekeń checker in figure 2 provided errors. That should be "háreket" But, the kid misspelled it, calling it "hareket" which is obviously incorrect. The spell checker found it and marked it. But when you performed a right-click to get suggestions, "háreketi," "háreketti" "háreketke" and so on were displayed. The Orfo-Qarekeń checker's recommendations are based on algorithms. It is compared to dictionary words via the Orfo-Qarekeń checker.

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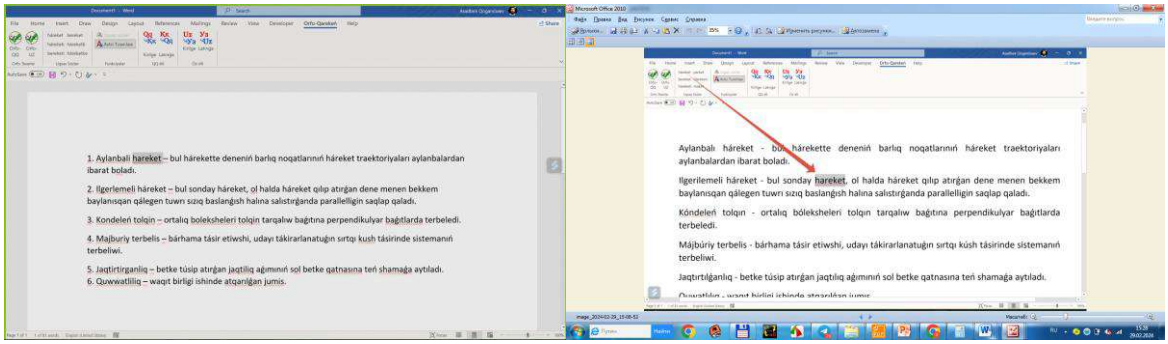


Figure 2. Example of Orfo-Qarekeń checker Spelling Suggestion by Microsoft Word

The last two research questions looked at how the Orfo-Qarekeń checker affected the spelling errors at a cognitive level. The study's findings indicate that there is no significant difference between the experimental group's pre-test and post-test results, and it also confirmed that there is no significant difference between the post-test results from the experimental and control groups. This indicates that the treatment had little to no impact on the errors that pupils made at a cognitive level because it did not assist in correcting the errors and the corrections were not internalized, allowing pupils to repeat the same mistake again.

The results of this study should be used by educators to update the syllabus and subject matter of their language and physics classes in Karakalpak, as well as the manner in which tests are given to pupils. It is unfair for pupils to complete their homework and assignments on computers, where they have access to spell checks, and then take exams without computers, relying instead on their language skills. Their language practice is the reason behind this. did not allow them to correct any spelling mistakes they may have made because they relied on spell checkers for practice. The ongoing assignments and the finished result must be parallel to one another; otherwise, the final output will not be completed.

Software engineers should enhance word suggestions and error detection in Orfo-Qarekeń writer spell-checkers. It ought to incorporate regional terms that have been incorporated into the Karakalpak Language Glossary of Physics. Perhaps pointing out the spelling mistake isn't sufficient.Word processor apps that are tailored for physics learners can be made by developers; these programs highlight spelling errors but do not offer corrections. The pupil will be prompted to locate the desired term by opening a dictionary. Although it takes longer, there's a chance that it will help internalize error correction. Perhaps if spell-checkers are enhanced with explanation or voice application, the correction of spelling error will be effectively

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internalised thus helping physics learners in Karakalpak language to be more competent in the language.

Knowing that the spell-checker has no influence on pupils' ability to generate repairs for spelling errors, what physics teachers in a computer classroom could do is remind learners that the spell-checker is not always correct. Physics teachers could also remind learners that they can use spell-checkers to their advantage by looking at how the word is spelled and not just clicking on the spelling. By doing this, the pupils will not only be more cautious when selecting suggested spellings by the spell-checker, but they will also make sure they remember the corrections they have made.

Participants may be subjected to additional corrective feedback during the time between the treatment and the post-test, which could affect the post-test outcomes. The experiment was carried out over a span of two weeks in order to eliminate this issue. That doesn't, however, stop the learners from fixing their mistakes with alternative, more useful feedback. Additionally, it would be preferable if the research was conducted over an extended period of time. To compare the outcomes, multiple treatment processes using different instruments can be applied to the same group instead of just one. Additionally, it will offer verifiable evidence of how spell checkers affect pupils' capacity to produce correct spelling errors.

The sample of words may also be selective for specific categories of errors; for instance, the word "ráwshanlıq" in which most participants spell it incorrectly, increases the frequency of omission errors committed; additionally, future researchers should add more targeted words rather than just five sentences with 15 flagged words—or, if feasible, target and analyze all the words in the sentences provided. The instrument of this research may also be insufficient. Additionally, the exam should be administered concurrently to a wide group of participants, allowing the researcher to control for unrelated factors like venue condition, mood, temperature, etc. Helpers must to be there as well to ensure that participants don't cheat or talk to their pals.

Conclusion and recommendations. In conclusion, this research suggests that spell-checkers have little to no effect whatsoever. on pupils' spelling errors on the cognitive level. It did not help repair the errors, and the Corrections are not internalized, thus allowing learners to repeat the same error. It is hoped that future studies take into consideration the limitations of the study and the suggestions for further research. This is necessary for future studies to draw more concrete conclusions on the influence of spelling-checkers on pupils' abilities to generate

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repairs. As educators, it is important for us to know that technology can only do so. much to help physics learners improve their language skills. Although the spelling spellingchecker was not invented to help physics learners learn and improve their spelling, it.

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