SAMARQAND DAVLAT CHET TILLAR INSTITUTI HUZURIDAGI ILMIY DARAJALAR BERUVCHI PhD.03/2025.27.12.Ped.37.01 RAQAMLI ILMIY KENGASH

SAMARQAND DAVLAT CHET TILLAR INSTITUTI

DUSHANOVA NARGIZA MAMATKULOVNA

BO‘LAJAK INGLIZ TILI MUTAXASSISLARINING YUQORI DARAJADAGI KOGNITIV KOMPETENSIYALARINI “PHENOBL” TA’LIM YONDASHUVI ASOSIDA TAKOMILLASHTIRISH

13.00.02 – Ta’lim va tarbiya nazariyasi va metodikasi (ingliz tili)

Pedagogika fanlari bo‘yicha falsafa doktori (PhD) dissertatsiyasi AVTOREFERATI

Samarqand – 2026

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**Pedagogika fanlari bo‘yicha falsafa doktori (PhD)
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**Оглавление автореферата диссертации доктора философии (PhD)
по педагогических наукам**

**Contents of dissertation abstract of doctor of philosophy (PhD)
on pedagogical sciences**

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Pedagogika fanlari bo'yicha falsafa doktori (PhD) dissertatsiyasi mavzusi O'zbekiston Respublikasi Oliy ta'lim, fa'n va innovatsiyalar vazirligi huzuridagi Oliy attestatsiya komissiyasida B2025.1.PhD/Ped8171 raqami bilan ro'yxatga olingan.

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Ilmiy rahbar:	**Tuxtasinov Ilhomjon Madaminovich** pedagogika fanlari doktori (DSc), professor
Rasmiy opponentlar:	**Sabirova Gulnoza Sadikovna** pedagogika fanlari doktori (DSc), dotsent
	Normatova Nurjamol Normatovna pedagogika fanlari bo'yicha falsafa doktori (PhD), dotsent
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Dissertatsiya himoyasi Samarqand davlat chet tillar instituti huzuridagi ilmiy darajalar beruvchi PhD.03/2025.27.12.Ped.37.01 raqamli Ilmiy kengashning 2026-yil "_____" _____ soat ____dagi majlisida bo'lib o'tadi. (Manzil: 140104, O'zbekiston, Samarqand, Gagarin ko'chasi, 43-uy. Tel: (99866) 238-29-37; faks: (99866) 210-00-18; e-mail: info@samdchti.uz.

Dissertatsiya bilan Samarqand davlat chet tillar institutining Axborot-resurs markazida tanishish mumkin (_____-raqami bilan ro'yxatga olingan). Manzil: 140117, O'zbekiston, Samarqand, Gagarin ko'chasi, 43-uy. Tel: (99866) 238-29-37.

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U.U. Jumanazarov
Ilmiy darajalar beruvchi ilmiy kengash raisi, pedagogika fanlari doktori (DSc), professor

A.E. Rustamova
Ilmiy darajalar beruvchi ilmiy kengash ilmiy kotibi, pedagogika fanlari doktori (DSc), dotsent

A.Y. Nurmuratov
Ilmiy darajalar beruvchi ilmiy kengash qoshidagi ilmiy seminar raisi, pedagogika fanlari bo'yicha falsafa doktori (PhD), dotsent

KIRISH (falsafa doktori (PhD) dissertatsiyasi annotatsiyasi)

Dissertatsiya mavzusining dolzarbligi va zarurati. Jahonda oliy ta’lim tizimi oldida raqamli transformatsiya, bilim iqtisodiyoti va innovatsion jamiyat talablariga javob beradigan yangi model – Universitet 4.0ni shakllantirish vazifasi turibdi. Ushbu modelning asosiy xususiyati talabalarda nafaqat nazariy bilimlarni, balki yuqori darajadagi kognitiv kompetensiyalarni – tanqidiy fikrlash, muammoni hal qilish, ijodkorlik va qaror qabul qilish ko‘nikmalarini shakllantirishga qaratilganligidir. Universitet 4.0 modeli doirasida ta’lim jarayonini real hayotiy voqeliklar bilan integratsiya qilish, fanlararo chegaralarni yengib o‘tish va innovatsion ta’lim yondashuvlarini qo‘llash muhim ahamiyat kasb etadi. Shu nuqtayi nazardan, fenomenlarga asoslangan ta’lim (PhenoBL) yondashuvi yuqori darajadagi kognitiv kompetensiyalarni rivojlantirishning samarali mexanizmi sifatida qaraladi. “PhenoBL” ta’lim yondashuvi talabalarni murakkab muammoli vaziyatlarni tahlil qilish, baholash va ijodiy yechimlar topishga tayyorlaydi, shuningdek, bilimlarni turli kontekstlarda tanqidiy qo‘llash imkonini beradi. “PhenoBL”orqali real hayotga asoslangan muammolarni hal etish kompetensiyalarini shakllantirish masalasi Universitet 4.0 modelining nazariy asoslari va amaliy talablari bilan uzviy bog‘liq bo‘lib, zamonaviy ta’limni modernizatsiya qilishning dolzarb yo‘nalishlaridan biri sifatida e’tirof etiladi.

Dunyo ta’lim amaliyotida, fenomenlarga asoslangan ta’lim (PhenoBL) innovatsion yondashuv sifatida keng qo‘llanilmoqda. Xususan, Finlyandiya ta’lim tizimi “PhenoBL”ni milliy o‘quv dasturlariga integratsiya qilish orqali yuqori darajadagi kognitiv kompetensiyalar – tanqidiy fikrlash, tahlil qilish, baholash va ijodiy fikrlashni samarali rivojlantirishga erishmoqda. Ushbu tajriba “PhenoBL” ta’lim yondashuvining fanlararo integratsiya, real voqelikni izchil o‘rganish va o‘quvchilarni mustaqil hamda ijodiy fikrlovchi shaxs sifatida shakllantirishdagi salohiyatini yaqqol namoyon etmoqda. Mazkur yondashuvning interdisiplinar xarakteri ta’lim oluvchilarga bilimlararo bog‘lanishlarni shakllantirish, ta’limni kontekstual va moslashuvchan tarzda tashkil etish imkonini beradi. Shu bois, PhenoBL nafaqat umumiy ta’lim tizimi uchun, balki Universitet 4.0 modelini shakllantirishda ham dolzarb ahamiyat kasb etib, zamonaviy ta’limni modernizatsiya qilishning muhim mexanizmlaridan biri sifatida qaralmoqda.

O‘zbekiston mustaqilligi davrida Uchinchi Renessans poydevorini barpo etish jarayonida oliy ta’lim tizimini modernizatsiya qilish dolzarb masala sifatida qaralmoqda. Bu jarayon, avvalo, Universitet 4.0 modelini shakllantirishni, ya’ni talabalarda yuqori darajadagi kognitiv kompetensiyalarni rivojlantirishni taqozo etadi. Bu borada mamlakatimizda ko‘plab amaliy, nazariy va konseptual ishlar amalga oshirilmoqda. Shu nuqtayi nazardan, fenomenlarga asoslangan ta’lim (PhenoBL) yondashuvi fanlararo integratsiya va real hayotiy muammolarni hal qilish kompetensiyalarini shakllantirishning samarali mexanizmi sifatida alohida ahamiyat kasb etadi. Mazkur yondashuvni chet tillarini o‘qitishda tatbiq etish nazariy va amaliy jihatdan dolzarb ilmiy ehtiyoj sifatida namoyon bo‘lmoqda[1].

[1]O‘zbekiston Respublikasi Prezidentining 2019-yil 8-oktyabrdagi “O‘zbekiston Respublikasi oliy ta’lim tizimini 2030-yilgacha rivojlantirish konsepsiyasi to‘g‘risida”gi PF-5847-son Farmoni.

O‘zbekiston Respublikasi Prezidentining 2019-yil 8-oktabrdagi PF-5847-sonli “O‘zbekiston Respublikasining 2030-yilgacha oliy ta’lim tizimini rivojlantirish Konsepsiyasini tasdiqlash to‘g‘risida”gi Farmoni, Oliy ta’lim tizimini yanada rivojlantirish bo‘yicha 2017-yil 20-apreldagi PQ-2909-sonli qarori, 2017-yil 27-iyuldagi PQ-3151-sonli “Oliy ta’lim mutaxassislarini tayyorlash sifatini yaxshilashda iqtisodiyotning tarmoqlari va sohalarining ishtirokini kengaytirish choralari to‘g‘risida”gi, 2021-yil 19-maydagi PQ-5117-sonli “O‘zbekiston Respublikasi hududida xorijiy tilni o‘rganishning sifat jihatidan yangi bosqichga olib chiqilishi choralari to‘g‘risida”gi, 2017-yil 18-maydagi 292-sonli Vazirlar Mahkamasining “O‘zbekiston Respublikasi Fanlar Akademiyasi yangi tashkil etilgan ilmiy tashkilotlar faoliyatini tashkil etish choralari to‘g‘risida”gi, 2018-yil 10-oktabrdagi 816-sonli "Oliy ta’lim muassasalarini o‘quv adabiyotlari bilan ta'minlash to‘g‘risida"gi qarorlarini hamda mazkur faoliyatga tegishli boshqa huquqiy-me’yoriy hujjatlarda belgilangan vazifalarni amalga oshirish mexanizmlarini takomillashtirishga ushbu dissertatsiya muayyan darajada xizmat qiladi.

Tadqiqotning respublika fan va texnologiyalari rivojlanishining ustuvor yo‘nalishlarga mosligi. Dissertatsiya respublika fan va texnologiyalari rivojlanishining I.“Axborotlashgan jamiyat va demokratik davlatni ijtimoiy, huquqiy, iqtisodiy, madaniy, ma’naviy-ma’rifiy rivojlantirishda innovatsion g‘oyalar tizimini shakllantirish va ularni amalga oshirish yo‘llari” ustuvor yo‘nalishiga muvofiq bajarilgan.

Muammoning o‘rganilganlik darajasi. Mamlakatimizda chet tillarini o‘qitish muammolari I.M.Tuxtasinov, J.J.Jalolov, G.X.Bakiyeva, L.T.Ahmedova, T.K.Sattorov, M.Jusupov, D.U.Hoshimova, U.U.Jumanazarov, A.E.Rustamova, A.Ya.Nurmuratov[2] va boshqa olimlarning tadqiqotlarida o‘z aksini topgan.

Kognitiv rivojlanish masalalari mamlakatimiz olimlaridan L.R.Zaripov, G.A.Amanova, A.A.Ibragimov, B.R.Adizov, D.B.Mirboboyeva[3] tomonidan tadqiq etilib, bu sohaning rivojlanishiga katta hissa qo‘shishgan.

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[2] Tukhtasinov I. M. Discursive approach in the training of translators //Mat. International scientific and creative forum" Youth in science and culture of the XXI century". Chelyabinsk: Chelyabinsk State Institute of Culture. – 2017. – С. 229-231.; Жалолов Ж. Чет тил ўқитиш методикаси. – Т., 2012. – 432 б.; Bakieva G.Kh., Tukhtasinov I.M. Expressing Stylistic Devices in Compound Words // Eastern European Scientific Journal. – Ausbage, 2018. №3 – p. 49-55; Ахмедова Л.Т. Роль и место педагогических технологий в профессиональной подготовке студентов. – Ташкент: Фан ва технология, 2009. – 160 с.; Сатторов Т. Бўлажак чет тили ўқитувчисининг услубий омилкорлигини шакллантириш технологияси (инглиз тили материалида) ТДЮИ. – Т., 2003. – 198 б.; Джусупов М. Билингвальное образование: проблема звуковой и лингвокультурной интерференции. // Вестник РУДН. 2017. №3. – С.351-358.; Хошимова Д.У. Лингводидактические основы изучения лакун в контексте современного функционирования русского языка и межязыковых взаимодействий: Дис. … докт. Пед. наук. – Т., 2007. – 209 с.; Jumanazarov U. U. Innovative learning technologies in the digital learning environment //European Journal of Research and Reflection in Educational Sciences. – 2020. – Т. 8. – С. 120-125.; Eshankulovna R. A. The importance of assesment in foreign language teaching //scientific approach to the modern education system. – 2025. – Т. 3. – №. 35. – С. 27-31.; Anvar N. Developing the professional competence of english language teachers through grants in the context of international cooperation //tanqidiy nazar, tahliliy tafakkur va innovatsion g ‘oyalar. – 2025. – т. 1. – №. 5. – с. 350-352.

[3]Zaripov L.R., Amanova G.A. “Pedagogika oliy ta’lim muassasalarida talabalarni o‘qitish jarayonida kognitiv kompetentsiyalarni rivojlantirish”//Tashkent Medical Academy Volume 4 | TMA Conference | 2024. Integration of Science, Education and Practice in Modern Psychology and Pedagogy: Problems and Solutions 2024. – B. 369-373; Xudoyberganov D. Y. (2024) ‘Stages of formation of cognitive competence in primary school students’, Inter education & global study, (7), 2024. – P. 76–83; Ibragimov A.A. Pedagogik ta’limda kognitiv texnologiyalarni qo‘llashning nazariy asoslari. Kognitiv va neyropedagogik tadqiqotlarning ta’lim amaliyotiga tatbig‘i // Xalqaro ilmiy

Yuqori darajadagi kognitiv kompetensiyalar rivojlanishi B.S.Blum, L.W.Anderson, D.R.Krasvol, R.J.Sternberg, J.H.Fleivel, R.H.Ennis, L.Elder[4] kabi xorijiy olimlar tomonidan izchil tadqiq qilingan.

Kognitiv jarayonlar, til va inson tafakkuri mexanizmlari, kognitiv kompetensiyalarning ta'limdagi tipologiyasi va rivojlanish masalalari borasida E.Tikhonova, N.Kudinova, R.P.Millrood, I.R.Maksimova[5] kabi olimlar tomonidan tadqiq etilgan.

"PhenoBL" ta'lim yondashuvining nazariy asoslari xorijiy olimlardan J.Piaget, L.S.Vigotski, J.Dyuvi, D.A.Kolb, J.Leiv, E.Venger, J.Braun[6] va boshqa olimlarning pedagogik-psixologik nazariyalariga tayanadi.

"PhenoBL" ta'lim yondashuvining ta'limda foydalanish masalasi chet el olimlaridan P.Sahlberg, P.Silander, P.Mattila, V.Simeonidis, J.F.Shvarz, D.L.Filds, T.J.Kennedi, H.P.Nguyen, K.Lonka, S.Adipat[7] tomonidan tadqiq qilingan.

Tillarni o'qitishda fenomenga asoslangan ta'limdan foydalanish masalasini MDH davlatlari olimlaridan T.S.Makarova, E.E.Matveeva, M.A.Molchanova va E.A.Morozova, A.S.Beloborodov[8] kabi olimlar tomonidan tadqiq etilgan.

- amaliy konferensiyasi materiallari. – Samarqand viloyati. PYMO'MM, 2024. A.A. 680 b.; Adizov B.R. O'qituvchi faoliyatida kognitiv kompetensiyaning orni //tanqidiy nazar, tahliliy tafakkur va innovatsion g 'oyalar. – 2025. – т. 1. – №. 1. – с. 28-33.; Mirboboyeva D.B. Fransuz tili darslarida o 'quvchilarning kognitiv kompetensiya va bilish qobiliyatlarini rivojlantirish usullari //pedagogik islohotlar va ularning yechimlari. – 2025. – т. 12. – №. 02. – с. 139-140.

[4] Bloom B. S. et al. Handbook I: cognitive domain //New York: David McKay. – 1956. – С. 483-498.; Krathwohl D. R. A revision of Bloom's taxonomy: An overview //Theory into practice. – 2002. – Т. 41. – №. 4. – С. 212-218.; Sternberg R. J., Sternberg K., Mio J. Cognitive psychology. – Belmont, CA: wadsworth, 2009. – С. 25-29.; Flavell J. H. Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry //American psychologist. – 1979. – Т. 34. – №. 10. – С. 906.; Ennis R. H. A logical basis for measuring critical thinking skills //Educational leadership. – 1985. – Т. 43. – №. 2. – С. 44-48.; Elder L. Critical thinking and emotional intelligence //Inquiry: Critical thinking across the disciplines. – 1996. – Т. 16. – №. 2. – С. 35-49.;

[5] Tikhonova E., Kudinova N. Sophisticated thinking: higher order thinking skills //Journal of Language and Education. – 2015. – Т. 1. – №. 3. – С. 12-23.; Millrood R., Maksimova I. Cognitive skills in education: typology and development //Язык и культура. – 2018. – №. 42. – С. 137-151.

[6] Piaget J. Piaget's theory //Piaget and his school: A reader in developmental psychology. – Berlin, Heidelberg: Springer Berlin Heidelberg, 1976. – С. 11-23.; Vygotsky L. S. Thought and language. – MIT press, 2012. – Т. 29.; Dewey J. Experience and education //The educational forum. – Taylor & Francis Group, 1986. – Т. 50. – №. 3. – С. 241-252.; Kolb D. A. Experiential learning: Experience as the source of learning and development. – FT press, 2014.; Lave J. Cognition in practice: Mind, mathematics and culture in everyday life. – Cambridge University Press, 1988.; Wenger E. et al. Communities of practice: Learning as a social system //Systems thinker. – 1998. – Т. 9. – №. 5. – С. 2-3.; Brown J. S., Collins A., Duguid P. Situated cognition and the culture of learning //1989. – 1989. – Т. 18. – №. 1. – С. 32-42.

[7] Sahlberg P. Finnish schools and the global education reform movement //Flip the system. – Routledge, 2015. – P. 162-177; Silander P. et al. Learning Computational Thinking in Phenomena-Based Co-creation Projects: Perspectives from Finland //Computational thinking education in K-12: Artificial intelligence literacy and physical computing. – MIT press, 2022. – P. 103-119; Mattila P., Silander P. How to create the school of the future: Revolutionary thinking and design from Finland //Finland: Multprint. – 2015; **S**ymeonidis V., Schwarz J. F. Phenomenon-based teaching and learning through the pedagogical lenses of phenomenology: The recent curriculum reform in Finland //Forum Oświatowe. – Uniwersytet Dolnośląski DSW. Wydawnictwo Naukowe DSW, 2016. – Т. 28. – №. 2 (56). – P. 31-47; Fields D., Kennedy T. J. What if… Phenomenon-based learning projects: Augmenting upper and early learning STEM lessons //INTED2020 Proceedings. – IATED, 2020. – С. 88-95.; Nguyen H. P. Phenomenon-based learning in Finnish and Vietnamese upper secondary school curriculum for English as a foreign language. 2018. – P. 130; Lonka K. & Westling S.K. Phenomenon-based Learning. In Lonka K. Phenomenal learning from Finland (1 edition). 2018. – P. 172–191.; Adipat S. Transcending traditional paradigms: the multifaceted realm of phenomenon-based learning //Frontiers in Education. – Frontiers Media SA, 2024. – Т. 9. – С. 1346403.

[8] Makarova T. S. et al. Phenomenon-based approach to teaching Russian as a foreign language in the cultural context //European Proceedings of Social and Behavioural Sciences. – 2020. – P. 95; Белобородов А.С. The Method of Phenomenon-Based Learning //Linguistic Education Today: Culture, Communication, and Content and Language Integration. – 2018. – P. 53-57.

Mahalliy va xorijiy ilmiy adabiyotlar tahlili hozirgacha oliy ta’lim doirasida ingliz tilini o‘rganayotgan ikkinchi kurs talabalari o‘rtasida yuqori darajadagi kognitiv kompetensiyalarini „PhenoBL” ta’lim yondashuvi asosida takomillashtirish masalasi alohida tadqiq etilmaganini ko‘rsatishi mazkur tadqiqotning boshlanishi va olib borilishiga asos bo‘lib xizmat qildi.

Dissertatsiya tadqiqotining dissertatsiya bajarilgan oliy ta’lim muassasasining ilmiy-tadqiqot ishlari rejalari bilan bog‘liqligi. Tadqiqot ishi Samarqand davlat chet tillar instituti ilmiy-tadqiqot ishlari rejasining “Filologik oliy o‘quv yurtlarida chet tilini integrallashuv orqali o‘qitishda kadrlar tayyorlashning filologik hamda metodik asoslarini takomillashtirish” bandi doirasida bajarilgan.

Tadqiqotning maqsadi oliy ta’lim tashkilotlarida fenomenga asoslangan ta’lim (PhenoBL) yondashuvini qo‘llash asosida bo‘lajak ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyalarini takomillashtirishdan iborat.

Tadqiqotning vazifalari:

konstruktivizm, ijtimoiy konstruktivizm, emergent learning va situated cognition nazariy konsepsiyalarini integratsiyalash asosida yaratilgan EED (Engage, Explore and Discover) uch fazali pedagogik texnologiyaning analitik, evaluative, kreativ va metakognitiv komponentlarini samaradorligini ilmiy asosda aniqlash;

“Uzbek PhenoBL” ta’lim modelining “Loyihalar asosida o‘qitish”, “Muammoli vaziyatlarda o‘qitish”, “tadqiqot va izlanishga oid o‘qitish”, fanlar aro o‘qitish”, “metakognitiv” “hamkorlik va jamoaviy”, “raqamli va aralash”, “baholashning shakllantiruvchi va xulosalovchi” usullariga tayanuvchi didaktik mexanizmining integratsiya qilinishi talabalarning analitik fikrlash, tanqidiy tahlil, fanlararo izlanish, hamkorlikda ishlash, o‘z-o‘zini baholash orqali o‘quv jarayonini didaktik jihatdan rivojlantirishning samarali vositasi ekanligi aniqlash;

talabalarning kognitiv rivojlanishini monitoring qilish vazifasini phenobl.uz elektron sayti tarkibiy qismi e-HOCC jurnali orqali talabalarning transversal-kognitiv, metakognitiv, ijtimoiy, kommunikativ va raqamli kompetensiyalarini rivojlanishini empirik jihatdan tekshirish va ularning kognitiv rivojlanish trayektoriyalarini belgilash;

tadqiqot doirasida PhenoBL” ta’lim yondashuvi tamoyillari va Cambridge AS va A level thinking skills dasturi maqsadlari asosida shakllantirilgan “Uzbek PhenoBL” modeli talabalarning mustaqil tadqiqot qilish qobiliyatlarini rivojlantirishga qaratilgan interdisiplinar komponenti “talabaga yo‘naltirilgan”, “amaliyotga asoslangan ta’lim” va “uzluksiz ta’lim” konsepsiyalarini rivojlantirishini aniqlash;

olingan natijalar asosida PhenoBL yondashuvini yuqori darajadagi kognitiv kompetensiyalarni rivojlantirishda qo‘llash bo‘yicha amaliy tavsiyalar ishlab chiqish belgilangan.

Tadqiqotning obyekti oliy ta’lim tashkilotlarining ikkinchi kursida ingliz tilini o‘rganayotgan talabalar o‘rtasida fenominga asoslangan ta’lim orqali yuqori darajadagi kognitiv kompetensiyalarni rivojlantirish jarayoni tanlangan.

Tadqiqotning predmetini bo‘lajak ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyalarini takommilashtirishning mazmuni, shakllari va usullari tashkil etadi.

Tadqiqotning usullari. Mazkur ishda nazariy (tahliliy-statistik, qiyosiy-taqqoslash), diagnostik (so‘rovlar, suhbat, so‘rovnoma, kuzatish), prognostik (ekspert baholash, baholarni mustaqil umumlashtirish), pedagogik tajriba-sinov hamda matematik-statistik tahlil (ma’lumotlarni statistik qayta ishlash, natijalarni grafik tasvirlash va boshqalar) usullardan foydalanildi.

Tadqiqotning ilmiy yangiligi quyidagilardan iborat:

bo‘lajak ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyalarini bosqichma-bosqich rivojlantiruvchi, konstruktivizm, ijtimoiy konstruktivism, emergent learning va situated cognition nazariy konsepsiyalari integrallashuvi asosida yaratilgan EED (Engage, Explore and Discover) uch fazali pedagogik texnologiyasining analitik, evaluative, kreativ, metakognitiv komponentlarining samaradorligi ilmiy asosda isbotlangan;

“Uzbek PhenoBL” ta’lim modelining “Loyihalar asosida o‘qitish”, “Muammoli vaziyatlarda o‘qitish”, “Tadqiqot va izlanishga oid o‘qitish”, Fanlararo o‘qitish”, “Metakognitiv” “Hamkorlik va jamoaviy”, “Raqamli va aralash”, “Baholashning shakllantiruvchi va xulosalovchi” usullariga tayanuvchi didaktik mexanizmining integratsiya qilinishi talabalarning analitik fikrlash, tanqidiy tahlil, fanlararo izlanish, hamkorlikda ishlash, o‘z-o‘zini baholash orqali o‘quv jarayonini didaktik jihatdan rivojlantirishning samarali vositasi ekanligi amaliy jihatdan dalillangan;

talabalarning mustaqil ta’limini nazorat qiluvchi, EED (Engage, Explore and Discover) pedagogik texnologiyasi asosida yaratilgan phenobl.uz elektron sayti tarkibidagi e-HOCC journali talabalarning kognitiv rivojlanish trayektoriyasini belgilab beruvchi Universitet 4.0 modeli talabidagi transversal-kognitiv, metakognitiv, ijtimoiy, kommunikativ, raqamli kompetensiyalarini rivojlantirishi empirik jihatdan isbotlangan;

“PhenoBL” ta’lim yondashuvi tamoyillari, Cambridge AS va A level Thinking skills dasturi maqsadlari asosida shakllantirilgan “Uzbek PhenoBL” modeli talabalarning mustaqil tadqiqot olib borish qobiliyatlarini rivojlantiruvchi interdisiplinar komponenti “talabaga yo‘naltirilgan”, “amaliyotga asoslangan ta’lim” va “uzluksiz ta’lim” konsepsiyalarini rivojlantirishi ilmiy asosda isbotlangan.

Tadqiqotning amaliy natijalari quyidagilardan iborat:

xorijiy va mahalliy adabiyotlar, shuningdek, mavjud amaliy tajribalar tahlil qilinib, ingliz tilini o‘rganuvchi talabalarda yuqori darajadagi kognitiv kompetensiyalarni rivojlantirishda fenomenga asoslangan ta’lim (PhenoBL) yondashuvining samaradorligi asoslab berildi;

ikkinchi bosqich talabalar uchun fenomenga asoslangan ta’lim doirasida yuqori darajadagi kognitiv kompetensiyalarni (tahlil qilish, baholash, ijodiy fikrlash) shakllantirishga xizmat qiluvchi metodik ta’minot ishlab chiqildi;

talabalar kognitiv kompetensiyalarini takomillashtirishda EED (Engage, Explore, and Discover) texnologiyasidan foydalanish bo‘yicha metodik tavsiyalar ishlab chiqildi;

an’anaviy va fenomen-ga asoslangan ta’lim darslarining umumiy va o‘ziga xos xususiyatlari, shuningdek, bu yondashuvlar orqali erishilgan o‘quv natijalari qiyosiy tahlil qilindi;

fenomen-ga asoslangan ta’lim asosida ishlab chiqilgan metodika eksperimental tarzda sinovdan o‘tkazilib, uning samaradorligi amaliy dalillar bilan asoslandi.

Tadqiqot natijalarining ishonchliligi dissertatsiya ishida qo‘llanilgan yondashuv, usul hamda ilmiy adabiyotlar va manbalarning ishonchliligi, pedagogik nazariyalar hamda zamonaviy metodikaga muvofiqligi, shuningdek, tahlillar va tajriba-sinov ishlari natijalarining ishonchliligi, ularning matematik-statistik jihatdan tahlil natijalarining mavjudligi, xulosalar taqdim etilganligi, ko‘rsatilgan tavsiyalarning amaliyotda tadbiq etilishi hamda vakolatli tashkilotlar tomonidan erishilgan natijalar rasmiylashtirilib tasdiqlanganligi bilan belgilangan.

Tadqiqot natijalarining ilmiy va amaliy ahamiyati. Tadqiqot ingliz tili o‘qituvchilarini tayyorlashda yuqori darajadagi kognitiv kompetensiyalarni rivojlantirish bo‘yicha nazariy asoslarni mustahkamlashga xizmat qiladi va PhenoBL yondashuvini O‘zbekiston oliy ta’lim muhitiga moslashtiradi. Tadqiqot doirasida analitik, baholovchi, ijodiy va metakognitiv boshqaruv o‘lchanadigan kompetensiyalar sifatida aniq belgilandi hamda ularni baholash mezonlari va darajalari ishlab chiqildi. Shuningdek, tadqiqot natijalari talaba markazli va kompetensiyaga asoslangan ta’lim yondashuvlarini o‘qituvchilar tayyorlash jarayoniga integratsiya qilish imkonini beradi va Universitet 4.0 modeli va zamonaviy ta’lim islohotlariga mos ravishda oliy ta’limni modernizatsiya qilishga hissa qo‘shadi.

Tadqiqotning amaliy ahamiyati uning real ta’lim jarayonida qo‘llanilishida namoyon bo‘ladi. Tadqiqot ingliz tili o‘qituvchilarini tayyorlash uchun tayyor ishlatiladigan PhenoBL asosidagi o‘quv modelini, aniq o‘qitish jarayonlari, o‘quv-topshiriqlar va baholash vositalarini taqdim etadi. Ushbu model o‘qituvchilarga talabalarning kognitiv kuchli va zaif tomonlarini aniqlash, shuningdek, natijalarga asoslangan baholashni amalga oshirish imkonini beradi. Bundan tashqari, yondashuv yuqori darajadagi tafakkur, tanqidiy fikrlash, ijodiylik va reflektiv ko‘nikmalarni rivojlantirishni qo‘llab-quvvatlaydi hamda universitet o‘quv dasturlari, o‘qituvchilarni qayta tayyorlash va malaka oshirish dasturlarida samarali tarzda tatbiq etilishi mumkin.

Tadqiqot natijalarining joriy qilinishi. PhenoBL yondashuvi orqali yuqori darajadagi kognitiv kompetensiyalarni rivojlantirishga qaratilgan nazariy va amaliy takliflar asosida:

bo‘lajak ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyalarini bosqichma-bosqich rivojlantiruvchi, konstruktivizm, ijtimoiy konstruktivism, emergent learning va situated cognition nazariy konsepsiyalari integrallashuvi asosida yaratilgan EED (Engage, Explore and Discover) uch fazali pedagogik texnologyasining analitik, evaluative, kreativ, metakognitiv komponentlarining samaradorligini ta’minlashga xizmat qilganligi haqidagi ilmiy xulosalardan Akademik E.A.Buketov nomidagi Karaganda universiteti Xorijiy tillar fakulteti Xorijiy filologiya kafedrasining ta’lim jarayoniga joriy etildi (Akademik E.A.Buketov nomidagi Karaganda universitetining 2025-yil 29-apreldagi 01-2026-sonli ma’lumotnomasi). Natijada, mazkur texnikadan 2025-yil 29-apreldan boshlab “English for IELTS” fanini o‘qitish jarayonida tizimli ravishda joriy etish natijasida PhenoBL yondashuvi integratsiyalashgan, yuqori darajadagi kognitiv

kompetensiyalarni izchil va tizimli rivojlantirishga yo‘naltirilgan IELTS o‘quv materiallari ishlab chiqildi hamda ta’lim jarayoniga tatbiq etildi;

“Uzbek PhenoBL” ta’lim modelining “Loyihalar asosida o‘qitish”, “Muammoli vaziyatlarda o‘qitish”, “tadqiqot va izlanishga oid o‘qitish”, fanlar aro o‘qitish”, “metakognitiv” “hamkorlik va jamoaviy”, “raqamli va aralash”, “baholashning shakllantiruvchi va xulosalovchi” usullariga tayanuvchi didaktik mexanizmining integratsiya qilinishi talabalarning analitik fikrlash, tanqidiy tahlil, fanlararo izlanish, hamkorlikda ishlash, o‘z-o‘zini baholash orqali o‘quv jarayonini didaktik jihatdan rivojlantirishning samarali vositasi ekanligi amaliy jihatdan isbotlanganligi haqidagi ilmiy xulosalardan “English Access Microscholarship Program” loyihasi doirasida foydalanilgan (2024-yil 20-dekabrdagi 2829-02-sonli ma’lumotnoma, Samarkand Davlat Chet Tillar Instituti). Natijada, talabalarning analitik fikrlashi, tanqidiy tahlil qilish, fanlararo izlanish olib borish, jamoada hamkorlikda ishlash va o‘z-o‘zini baholash ko‘nikmalari rivojlanib, o‘quv jarayonining samaradorligi oshgani amaliy jihatdan tasdiqlandi.;

talabalarning mustaqil ta’limini nazorat qiluvchi, EED (Engage, Explore and Discover) pedagogik texnologiyasi asosida yaratilgan phenobl elektron sayti tarkibidagi e-HOCC journali talabalarning kognitiv rivojlanish trayektoriyasini belgilab beruvchi Universitet 4.0 modeli talabidagi transversal-kognitiv, metakognitiv, ijtimoiy, kommunikativ, raqamli kompetensiyalarni rivojlantirishi empirik jihatdan isbotlanganligi haqidagi ilmiy xulosalardan 2024-yilda Toshkentdagi AQSh elchixonasi tomonidan rejalashtirilgan “O‘zbekistonda Ingliz tilini maxsus maqsadlar uchun o‘rgatish” loyihasida tatbiq etildi (2025-yil 7-martdagi 661-02-sonli ma’lumotnoma, Samarkand Davlat Chet Tillar Instituti). Natijada, talabalarning kognitiv rivojlanish trayektoriyasini samarali kuzatish imkoniyati yaratildi, shuningdek, Universitet 4.0 modeli talablariga mos ravishda transversal-kognitiv, metakognitiv, ijtimoiy, kommunikativ va raqamli kompetensiyalari rivojlanib, mustaqil ta’lim samaradorligi oshgani amaliy jihatdan tasdiqlandi.

“PhenoBL” ta’lim yondashuvi tamoyillari va Cambridge AS va A level thinking skills dasturi maqsadlari asosida shakllantirilgan “Uzbek PhenoBL” modeli talabalarning mustaqil tadqiqot qilish qobiliyatlarini rivojlantiruvchi interdisiplinar komponenti “*talabaga yo‘naltirilgan”, “amaliyotga asoslangan ta’lim” va “uzluksiz ta’lim”* konsepsiyalarini rivojlantirishi bo‘yicha olingan ilmiy xulosalardan 2024-yil 25-iyunda efirga uzatilgan “Assalom, Samarqand!” teleko‘rsatuvi skriptini tayyorlashda foydalanildi (2025-yil 6-martdagi 01-07/-101-sonli ma’lumotnoma, Samarkand Davlat Chet Tillar Instituti). Natijada, teleko‘rsatuv mazmuni talabaga yo‘naltirilgan, amaliyotga asoslangan hamda uzluksiz ta’lim g‘oyalarini yoritishga xizmat qilib, talabalarning mustaqil tadqiqot olib borish, tanqidiy va analitik fikrlash ko‘nikmalarini rivojlantirishning ahamiyati keng jamoatchilikka tushunarli tarzda targ‘ib qilindi.

Tadqiqot natijalarining aprobatsiyasi. Tadqiqot ishining asosiy natijalari 4 ta xalqaro va 3 ta respublika ilmiy amaliy anjumanlarda muhokama qilingan.

Tadqiqot natijalarining e’lon qilinganligi. Tadqiqot mavzusi doirasida jami 15 ta ilmiy ish chop etilgan. Shundan 8 tasi ilmiy maqola bo‘lib, ularning 5 tasi

respublika ilmiy jurnallarida, 3 tasi esa xorijiy ilmiy jurnallarda e'lon qilingan. Mazkur nashrlar O'zbekiston Respublikasi Oliy attestatsiya komissiyasi tomonidan doktorlik dissertatsiyalarining asosiy ilmiy natijalarini e'lon qilish uchun tavsiya etilgan ilmiy nashrlar ro'yxatiga kiritilgan.

Dissertatsiyaning tuzilishi va hajmi. Dissertatsiya kirish va asosiy qism, 3 ta bob, xulosalar, foydalanilgan adabiyotlar ro'yxati va ilovalardan iborat. Dissertatsiyaning umumiy hajmi 159 sahifani tashkil etadi.

DISSERTATSIYANING ASOSIY MAZMUNI

Kirish qismida tadqiqotning dolzarbligi va zarurati asoslab beriladi, uning maqsad va vazifalari aniqlanadi, obyekti va predmeti tavsiflanadi, Respublika fan va texnologiyalarini rivojlantirishning ustuvor yo'nalishlariga muvofiqligi ko'rsatiladi, ilmiy yangilik va amaliy natijalar bayon etiladi, olingan natijalarning ilmiy va amaliy ahamiyati ochib beriladi, tadqiqot natijalarining amaliyotga joriy etilishi, chop etilgan ishlar va dissertatsiyaning tuzilishi haqida ma'lumot beriladi.

Dissertatsiyaning birinchi bobiga "Yuqori darajadagi kognitiv kompetensiyalar va fenomen-ga asoslangan ta'lim (PhenoBL) yondashuvi hamda ularni rivojlantirish mezonlarining nazariy asoslari" deb nom berilgan. Ushbu bobda yuqori darajadagi kognitiv kompetensiyalarning ta'rifi va mohiyati, ularning oliy ta'lim kontekstidagi ahamiyati haqida so'z boradi; Fenomen-ga asoslangan ta'lim yondashuvi nazariy asoslari, mezonlari hamda PhenoBL yondashuvini qo'llash talablari bayon qilinadi.

Bobning birinchi paragrafi "Yuqori darajadagi kognitiv kompetensiyalarni aniqlash va ularning oliy ta'lim kontekstidagi ahamiyati" deb nomlanadi. Ushbu paragrafda kognitiv kompetensiya, xususan yuqori darajadagi kognitiv kompetensiyalarni tashkil etuvchi komponentlari ta'riflanadi, fenomenning asosiy xususiyatlari tahlil qilinadi va oliy ta'lim muhitida ularni rivojlantirishning asoslari aniqlanadi.

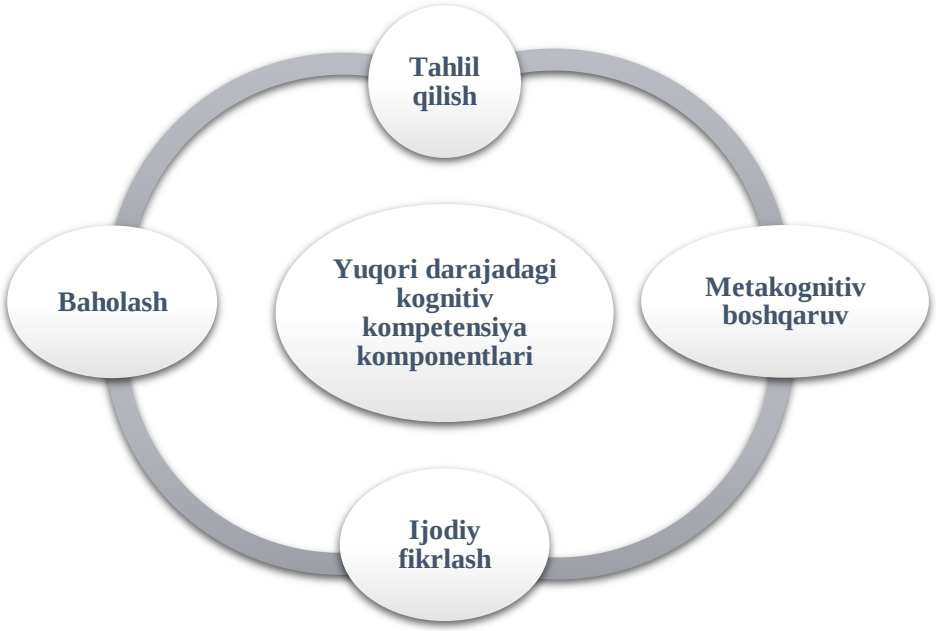
Kompetensiya inson kapitalining muhim boyligi hisoblanadi, u shaxs va jamiyatning mahsuldorligini oshiradi. Shu boisdan ta'limda kognitiv kompetensiyalar va kognitsiya falsafasini tadqiq etishga qiziqish tobora ortib bormoqda. Insonlarning voqelikni qanday talqin qilishi va anglash jarayoni ularning ongida mavjud bo'lgan kognitiv jarayonlar bilan belgilanadi.

R.Maksimova va I.Millroadning[9] ta'kidlashicha, kognitiv kompetensiyalar bu – o'quvchining axborotni qayta ishlash, yangi bilim yaratish, integratsiya qilish va vaziyatli muammolarni hal etish vositalarini ishlab chiqish hamda qo'llash imkonini beruvchi funksional mexanizmlaridir.

Bo'lajak ingliz tili mutaxassislarning kognitiv kompetensiyalarni rivojlantirishga e'tibor qaratishimizning asosiy sababi shundaki, bu ularning akademik faoliyatida amalga oshiradigan kognitiv operatsiyalari doirasiga bevosita taalluqlidir. Shu bilan birga, o'quvchilarning testlardagi standartlashtirilgan natijalariga ortiqcha e'tibor qaratish ularning kognitiv rivojlanish darajasini qanchalik aks ettirishi mumkinligi borasida savol tug'diradi

[9] Millrood R., Maksimova I. Cognitive skills in education: typology and development //Язык и культура. – 2018. – №. 42. – С. 137-151.

Ta’kidlash joizki, talabalarning testlardagi standartlashtirilgan yutuqlarining oshishi ko‘pincha ularda kognitiv kompetensiyalar emas, balki fan kompetensiyalarini rivojlantirish natijasidir[10]. Bu esa o‘z navbatida, akademik muassasalarda asosiy e’tibor fan bo‘yicha bilimlarni oshirishga qaratilib, intellektual salohiyatni shakllantirish va rivojlantirish masalasi yetarlicha baholanmayotganini anglatadi (1-rasmga qarang):



1-rasm. Yuqori darajadagi kognitiv kompetensiyalarning komponentlari

Yuqori darajadagi kognitiv kompetensiyalarning (HOCC) asosiy komponentlari sifatida A.Lewis va D.Smith[11] muammoni hal qilish, tanqidiy fikrlash, qaror qabul qilish va ijodiy fikrlash ko‘nikmalarini kiritadilar. K.Rhashvinder va K.Charanjit[12] esa bu tarkibga tanqidiy, mantiqiy, reflektiv, metakognitiv va ijodiy fikrlashni kiritadilar.

Bu yerda muhim savol tug‘iladi: yuqori darajadagi kognitiv kompetensiyalar qachon faollashadi? A.Kingning[13] ta’kidlashicha, yuqori darajadagi kognitiv kompetensiyalar o‘quvchi bahsli, notanish muammolar, noaniqliklarga duch kelganda faollashadi.

Keyingi paragrafda esa Fenomenlarga asoslangan ta’lim yondashuvining konseptual hamda nazariy asoslari tahlil qilindi (1-javalga qarang):

Fenomenlarga asoslangan ta’lim (PhenoBL) zamonaviy konstruktivistik o‘rganish nazariyalariga tayangan holda shakllangan bo‘lib, bilimni passiv tarzda qabul qilishdan ko‘ra uni faol ravishda konstruksiya qilish jarayonini ustuvor deb hisoblaydi (1-jadvalga qarang):

[10] Finn A. S. et al. Cognitive skills, student achievement tests, and schools //Psychological science. – 2014. – T. 25. – №. 3. – C. 736-744.
[11] Lewis A., Smith D. Defining higher order thinking //Theory into practice. – 1993. – T. 32. – №. 3. – C. 131-137.
[12] Singh R. K. A. et al. A review of research on the use of higher order thinking skills to teach writing //International Journal of English Linguistics. – 2018. – T. 8. – №. 1. – C. 86-93.
[13] King A. Structuring peer interaction to promote higher-order thinking and complex learning in cooperating groups //The teacher’s role in implementing cooperative learning in the classroom. – Boston, MA: Springer US, 2008. – C. 73-91.

1-jadval

Fenomenlarga asoslangan ta’lim yondashuvining nazariy asoslari

Nazariya	Ta’rif	Asosiy g‘oyalar	Asosiy nazariyotchilar
Konstruktivizm	O‘quvchilar tajriba orqali dunyo haqidagi tushuncha va bilimlarini quradilar hamda o‘sha tajribalarni tahlil qilib, o‘zlari yaratgan bilim egasiga aylanadilar.	O‘qish faol, konstruktiv jarayon sifatida qaraladi, tayyor holda emas, balki qurib boriladi. Yangi bilim avvalgi bilimlar asosida shakllanadi.	J.Piaget[14], J.Bruner[15]
Ijtimoiy konstruktivizm	Bilimni qurishda ijtimoiy muloqot, til va madaniyatning roli muhim. O‘qish jarayoni madaniy kontekstda hamkorlik va muloqot orqali shakllanadi.	Bilim ijtimoiy muloqot orqali yaratiladi. O‘rganishda “yaqin rivojlanish zonasi”da yo‘l-yo‘riq va yordam (scaffolding)ning ahamiyati ta’kidlanadi	L.Vygotsky[16]
Muayyan vaziyatda shakllanuvchi tafakkur (Situated Cognition)	Bu bilish (o‘rganish va fikrlash) jarayoni real ijtimoiy, madaniy va amaliy kontekst bilan chambarchas bog‘liq holda shakllanishini ta’kidlovchi nazariya. Ya’ni bilim: • abstrakt holda emas, • balki muayyan vaziyat, faoliyat va tajriba ichida hosil bo‘ladi	O‘qish kontekstga bog‘liq bo‘ladi va mazmunli faoliyatlar taqdim etilganda yaxshi rivojlanadi.	J.Lave[17], E.Wenger[18]
Tabiiy shakllanuvchi o‘rganish	Bu oldindan qat’iy rejalashtirilmagan, balki o‘quvchilarning ehtiyojlari, qiziqishlari, tajribasi va o‘zaro hamkorligi jarayonida asta-sekin paydo bo‘ladigan o‘rganish turidir. U murakkab tizimlar va muhitlar bilan o‘quvchilarning o‘zaro ta’siri asosida shakllanadi.	Bilim izlanish, tajriba va hamkorlik orqali yaratiladi. Uni qat’iy boshqarib bo‘lmaydi, u sharoitlarning o‘zgarishi orqali shakllanadi.	G.Siemens[19]

Konstruktivizmning asosiy g‘oyasiga muvofiq, o‘rganuvchilar bilimni o‘qituvchi tomonidan tayyor holatda uzatiladigan ma’lumot sifatida emas, balki tajriba, refleksiya va yangi axborotni mavjud bilimlar tizimi bilan uyg‘unlashtirish orqali mustaqil ravishda shakllantiradilar[20]. Konstruktivistik epistemologiyaga ko‘ra, bilim na passiv o‘zlashtiriladigan hodisa, na voqelikning qat’iy va o‘zgarmas in’ikosi bo‘lib, balki o‘rganuvchining mavjud kognitiv tuzilmalari hamda atrof-muhit bilan o‘zaro ta’siri natijasida vujudga keladigan faol talqin jarayoni hisoblanadi[21].

“PhenoBL” yondashuvini pedagogik nuqtai nazardan ta’riflash jarayonida uning asosiy pedagogik tamoyillarini e’tibordan chetda qoldirmaslik lozim. Fenomenlarga asoslangan ta’lim muhiti, bu o‘quvchiga yo‘naltirilgan, fanlararo yondashuvga tayanuvchi hamda o‘quvchilarning izlanishi va muammolarni ilmiy

[14] Piaget J. Piaget’s theory //Piaget and his school: A reader in developmental psychology. – Berlin, Heidelberg: Springer Berlin Heidelberg, 1976. – C. 11-23.
[15] Bruner J. A short history of psychological theories of learning //Daedalus. – 2004. – T. 133. – №. 1. – C. 13-20.
[16] Vygotsky L., Cole M. Lev Vygotsky: Learning and social constructivism //Learning Theories for Early Years Practice. UK: SAGE Publications Inc. – 2018. – C. 68-73.
[17] Lave J. Situating learning in communities of practice. – 1991.
[18] Wenger E. et al. Communities of practice: Learning as a social system //Systems thinker. – 1998. – T. 9. – №. 5. – C. 2-3.
[19] Siemens G., Tittenberger P. Handbook of emerging technologies for learning. – Manitoba: University of Manitoba, 2009. – C. 65.
[20] Tryphon A., Voneche J. Working with Piaget: Essays in Honour of Barbel Inhelder. – Psychology Press, 2013.
[21] Gallas K. Talking their way into science: Hearing children's questions and theories, responding with curricula. – Teachers College Press, 1995.

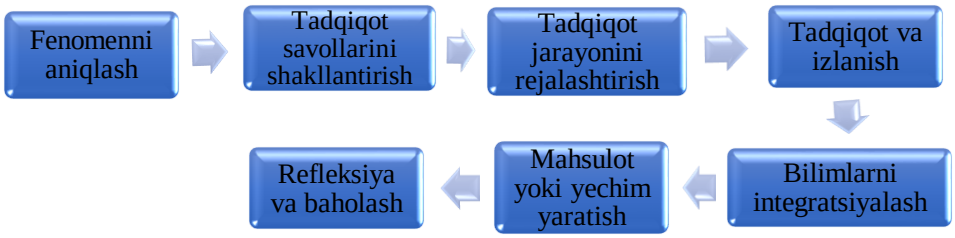
tarzda hal qilish faoliyatiga asoslangan ta’lim usulidir. V.Symeonidis[22] tasnifiga ko‘ra, fenomenlarga asoslangan ta’limning asosiy tamoyili quyidagilar: *yaxlitlik, kontekstualizatsiya, muammoga asoslangan izlanish, o‘qituvchi rolining o‘zgarishi, reallik va o‘rganish jarayonidir*.

Fenomenlarga asoslangan ta’lim (PhenoBL) o‘quv jarayonini yaxlit va integrativ yondashuv asosida tashkil etishni nazarda tutadi. Ushbu yondashuvga ko‘ra, ta’lim va real hayot hodisalari alohida fanlar doirasida emas, balki o‘zaro bog‘liq tizim sifatida talqin qilinadi. Shu bois, bilim va ko‘nikmalar real, mazmunli hamda dolzarb kontekstlarda shakllantiriladi va turli fanlar o‘rtasida integratsiya ta’minlanadi.

“PhenoBL”da o‘rganish jarayoni o‘quvchilar tomonidan ilgari surilgan hamda real hayot bilan bog‘liq muammolar asosida tashkil etiladi. Bunda ta’lim jarayoni gipotezalar va turli modelllarni ishlab chiqish orqali amalga oshirilib, bilimni shunchaki yod olish bilan cheklanmaydi, balki uni chuqur anglash va amaliy qo‘llashga yo‘naltiriladi.

Mazkur yondashuv o‘qituvchining rolini ham o‘zgartiradi: u bilim manbai emas, balki o‘quvchilarning mustaqil izlanish faoliyatiga yo‘naltiruvchi va moderator sifatida namoyon bo‘ladi. Shuningdek, ta’lim jarayoni real hayot hodisalari va amaliyotlariga asoslanib, real manbalar hamda mutaxassislar ishtirokida tashkil etiladi.

PhenoBL yondashuvini o‘quv jarayoniga integratsiya qilish uning ta’lim bosqichlarini bilishni talab etadi (2-rasmga qarang):



2-rasm. “PhenoBL” ta’lim yondashuvining bosqichlari

Dissertatsiyaning ikkinchi bobiga “PhenoBL” ta’lim yondashuvi asosida yuqori darajadagi kognitiv kompetentsiyalarni takomillashtirishning metodologik asoslari” deb nom berilgan.

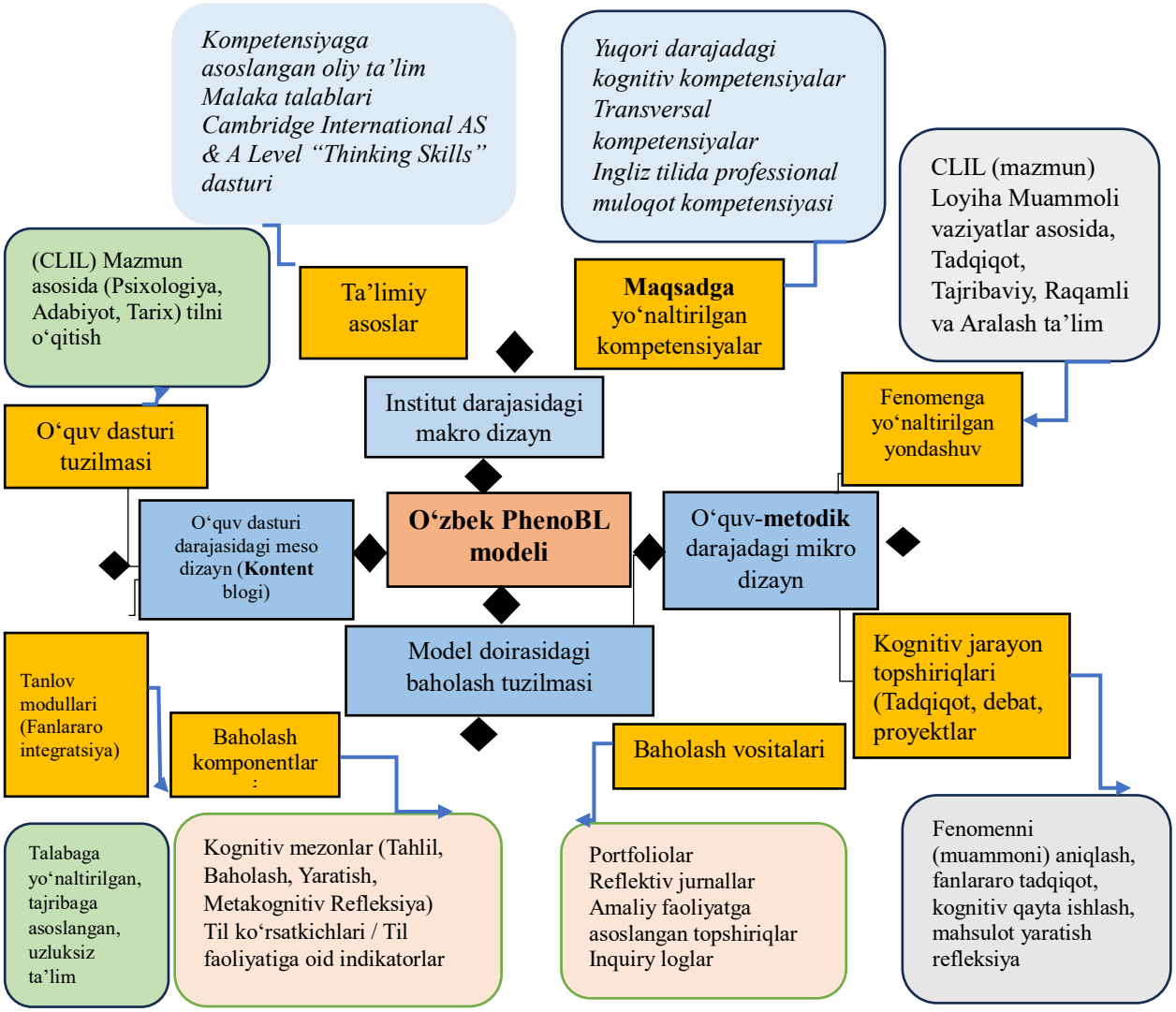
Birinchi paragraf (2.1) “Ikkinchi kurs talabalari uchun malaka talablarini, o‘quv dasturlarini va darsliklarni tahlil qilish” bo‘lib, unda ikki yo‘nalish – Xorijiy til va adabiyoti bakalavriati (60111800: Ingliz tili) va 60230100 – Filologiya va tillarni o‘qitish yo‘nalishining malaka talablarini, o‘quv dasturlarini, o‘quv rejalari va darsliklarini tahlil qilinadi. 2.2-paragrafda O‘zbekistonda PhenoBL modelini oliy ta’lim kontekstiga integratsiya qilishning kompleks tizimli yondashuvi tahlil qilinadi, 2.3-paragrafda til o‘rganish yo‘nalishidagi ta’lim muassasalarida ikkinchi kurs talabalari uchun “PhenoBL” yondashuvi orqali yuqori darajadagi kognitiv kompetensiyalarni takomillashtirishga mo‘ljallangan topshiriqlar tizimi tahlil qilinadi.

[22] Symeonidis V. Phenomenon-based teaching and learning through the pedagogical lenses of phenomenology: The recent curriculum reform in Finland. – 2016.

Ikki yo‘nalish uchun mo‘ljallangan me’yoriy hijjatlarini tahlil natijalari talabalarni til ko‘nikmalariga yo‘naltirilgan tarzda o‘qitish ularning og‘zaki va yozma muloqot ko‘nikmalari hamda turli kontekstlarda lingvistik, pragmatik va sotsiolingvistik kompetensiyalarini rivojlantirishga xizmat qilishi aniqlandi.

Ikkinchi paragrafda O‘zbekiston oliy ta’lim tizimida “PhenoBL” ta’lim yondashuvining integratsiya qilish modeli taklif etilgan bo‘lib, u Fin modeli asosida moslashtirilgan va bo‘lajak ingliz tili mutaxassislarini tayyorlash uchun oliy ta’lim kontekstiga integratsiya qilinishi, shuningdek, uning asosiy funksiyalari aniqlanishi ko‘zda tutilgan.

Taklif etilayotgan O‘zbek PhenoBL oliy ta’lim modeli kompetensiya va fenomenlarga asoslangan ta’limni birlashtirib, yuqori darajadagi kognitiv kompetensiyalar, transversal kompetensiyalar va ingliz tilida professional muloqot kompetensiyasiyalarini rivojlantirishga qaratilgan. Model institutsional, o‘quv dasturi va instruksional darajalarda amalga oshiriladi (3-rasmga qarang):



3-rasm. Bo‘lajak ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyasini takomillashtirishga yo‘naltirilgan O‘zbek PhenoBL didaktik modelining siklik tuzilishi

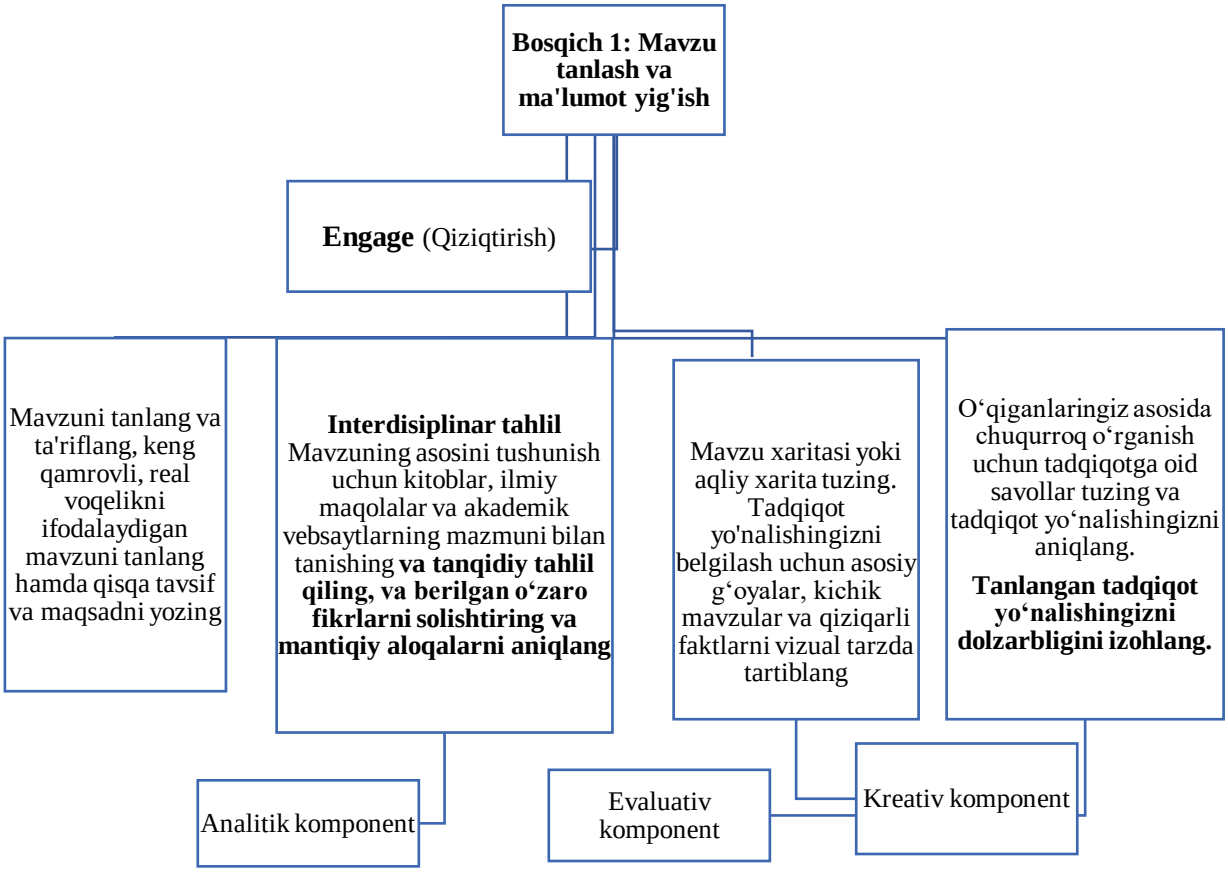
Institutsional darajada u O‘zbekistonning milliy malaka talablari hamda Cambridge International AS & A Level Thinking Skills dasturi bilan uyg‘unlashib,

tanqidiy fikrlash, muammolarni hal qilish, baholash, sintez, metakognitiv refleksiya va ingliz tilida professional muloqot ko‘nikmalarini rivojlantirishga qaratiladi.

O‘quv dasturi darajasida modullar Tarix, Adabiyot va Psixologiya kabi fanlar asosida tashkil etilib, fan doirasida mustaqil ta’lim tanlov modullari taklif qilinadi. Bu holatda talaba o‘z qiziqishi asosida mustaqil ta’lim modullarini tanlashlari va bir semestr davomida tadqiqotlarni olib borishlari mumkin. Masalan *globalizatsiya, raqamli ta’lim va sun’iy intellekt, jamoat salomatligi kommunikatsiyasi, iqlim o‘zgarishi* kabi mavzular doirasida tadqiqotlar tashkil etilishi mumkin.

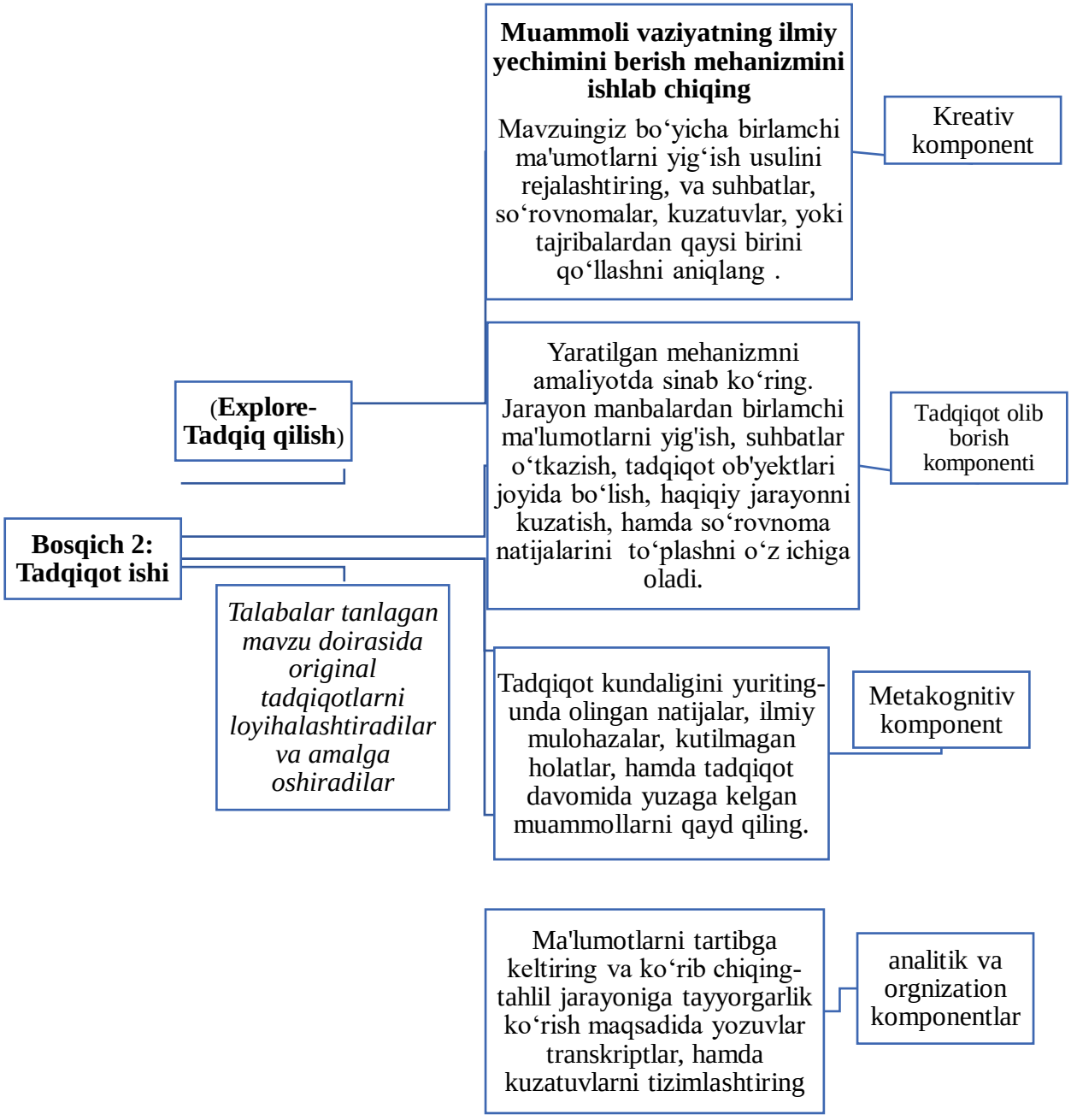
Instruksional darajada ta’lim jarayoni oltita bosqichni o‘z ichiga oladi: fenomenni tanishtirish, muammoni aniqlash, fanlararo tadqiqot, kognitiv tahlil, yaratish va refleksiya. Baholash mezonlari rubrikalar, portfoliolar va amaliy topshiriqlar orqali amalga oshiriladi. Modelni joriy etish uchun malakali o‘qituvchilar, moslashuvchan o‘quv dasturi, raqamli resurslar va institutsional darajadagi shart-sharoitlar bo‘lishi talab etiladi.

Ikkinchi bobning uchinchi paragrafi til o‘rganish muassasalarida PhenoBL yondashuvi orqali ikkinchi kurs talabalarda yuqori darajadagi kognitiv kompetensiyalarni rivojlantirishga mo‘ljallangan topshiriqlar tizimini shakllantirishga bag‘ishlangan. 4-, 5- va 6-rasmlar EED (Engage, Explore, Discover – Jalb qilish, Tadqiq qilish va Kashf etish) pedagogik texnologiyasi til o‘rganish tashkilotlarida PhenoBL yondashuvi orqali ikkinchi kurs talabalarda yuqori darajadagi kognitiv kompetensiyalarni rivojlantirish jarayoniga integratsiya qilish bosqichlarini vizual tarzda tasvirlaydi (4-rasmga qarang):



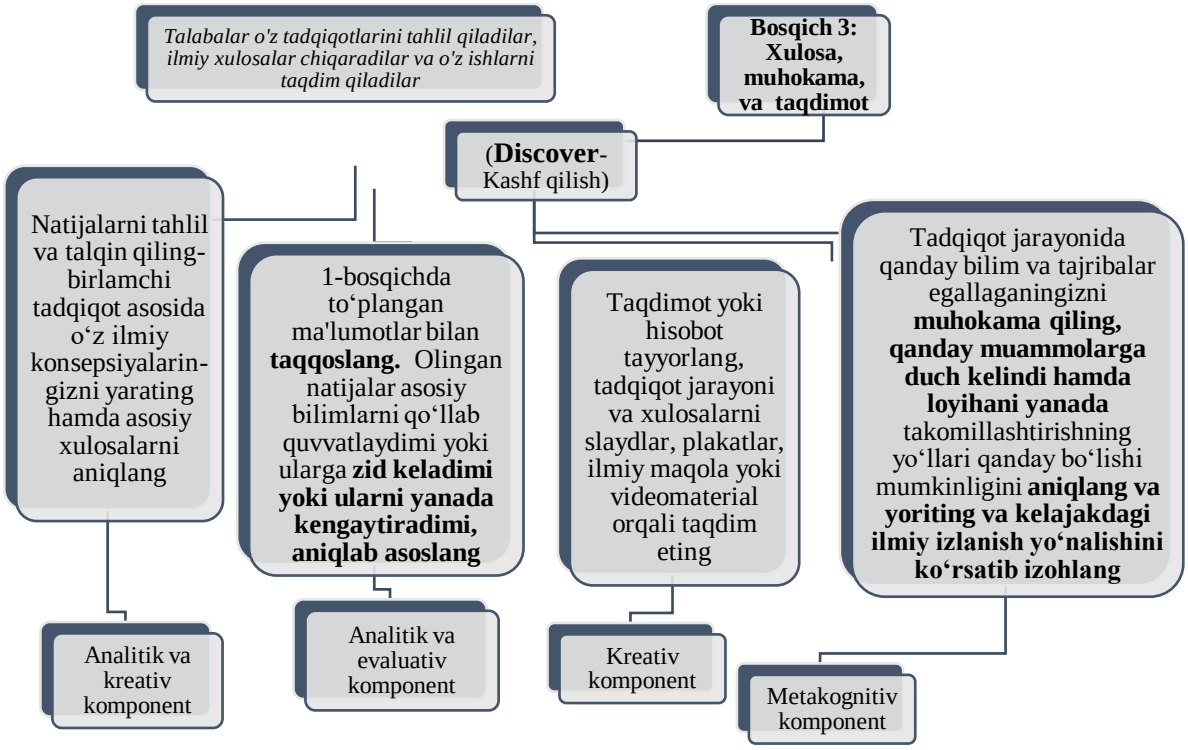
4-rasm. Qiziqtirish, Tadqiq etish va Kashf qilish texnikasi (1-bosqich)

Texnikaning birinchi bosqichida talabalar o‘zlarini chinakam qiziqtirgan umumiy mavzuni tanlaydilar. Ushbu mavzu real-hayotdagi muammolar voqea-hodisalar, atrof-muhit masalasi, kasb yo‘nalishi, ijtimoiy tendensiya yoki tarixiy voqea bo‘lishi mumkin. Mavzu keng qamrovli bo‘lishi va ma’lum bir muammo doirasida cheklanmasligi lozim. Talabalar tanlagan mavzularini aniq belgilab, uning maqsadi haqida qisqacha izoh berishlari shart (5-rasmga qarang):



5-rasm. Tadqiqot ishi olib borish bosqichi

Mustaqil o‘rganishning ikkinchi bosqichida talabalar tanlagan mavzulariga muvofiq original tadqiqot ishini rejalashtirish va amalga oshirish bilan shug‘ullanadilar. Avvalo ular asosiy ma’lumotlarni to‘plash usulini belgilaydilar va mavzuning tabiati va xususiyatiga qarab eng maqbul metodni tanlaydilar, masalan, suhbatlar, so‘rovnomalar, kuzatuvlar yoki tajribalar (6-rasmga qarang):



6-rasm. Xulosa, muhokama va taqdimot qilish bosqichi

Talabalar to‘plangan ma’lumotlarni tizimli ravishda tahlil qilib, o‘z tadqiqotlari natijalarini talqin qiladilar va mazmunli xulosalar hosil qiladilar. Ushbu bosqichda ular asosiy ma’lumotlardan olingan natijalarni batafsil o‘rganib, o‘zlari uchun ilmiy xulosalarni shakllantiradilar va tadqiqotlari asosida yuzaga kelgan noma’lum ilmiy tadqiqot mavzularini aniqlaydilar. Bu davrda o‘z ilmiy topilmalarini birinchi bosqichda to‘plangan bilimlari bilan solishtiradilar. Mazkur qiyoslash ilmiy topilmalarni mavzuga oid mavjud bilimlarni tasdiqlashi, kengaytirishi yoki zid kelishini aniqlash imkonini beradi.

Ushbu mustaqil ta’lim faoliyati talabalarni mustaqil o‘qish, tadqiqot olib borish va tanqidiy fikrlash ko‘nikmalarini rivojlantirishga yordam berish uchun ishlab chiqilgan bo‘lib, ularni olti haftalik shaxsiy qiziqish mavzusini mustaqil o‘rganishga yo‘naltiradi. Faoliyatning maqsadi – talabalarni mazmunli izlanishga jalb qilish, ularning o‘z ta’lim jarayonini nazorat qilishini ta’minlash hamda akademik va hayotiy ko‘nikmalarni shakllantirishdan iboratdir.

Fenomenni o‘rganishga qaratilgan o‘quv jarayoni mavzuni turli fanlar kesimida tadqiq qilish imkoniyatini yaratadi. Har bir guruh a’zosi o‘quv jarayonlarga olim, tadqiqotchi va mutaxassis sifatida yondashadi. Bu o‘z navbatida ularni o‘z ta’limlariga nisbatan yanada mas’uliyatli bo‘lishlariga undaydi va jarayonning har bosqichida ularning yuqori darajadagi kognitiv kompetensiya komponentlarining rivojlanishiga xizmat qiladi.

Garchi quyidagi o‘quv jarayoni uzoq muddat talab qilsa ham, tadqiqotlar shuni ko‘rsatadiki, Finlandiya ta’lim tizimida o‘z isbotini topganidek uni muntazam amalga oshirish vaqt o‘tishi bilan sezilarli natijalar beradi.

Tadqiqot ishini yakunlagach, o‘rganilgan fenomen bo‘yicha HOCC(higher-order cognitive competences) jurnal yoki portfolio va jarayonlar tafsilotlari yozib olingan Inquiry Log topshiriladi va ular formativ baholash uchun xizmat qiladi.

EED ped.texnologiyasida beriladigan topshiriq va mashqlar quyidagilardan iborat (2-3-jadvallarga qarang):

2-jadval

EED texnikasida qo‘llanuvchi topshiriq va mashqlar

Bosqichlar	Topshiriq 1	Topshiriq 2	Topshiriq 3	Topshiriq 4
1. Engage bosqichi (Qiziqtirish bosqichi) real hayot hodisasi orqali qiziqish uyg‘otish	**Kuzatuv vazifalari** Qisqa video, rasm ko‘rsatiladi. Nimalarni kuzatdingiz? Sizni nima hayratlantirdi?	**O‘yla–Juftlikda muhokama qil–Ulash (Think–Pair–Share)** Talabalar avval mustaqil o‘ylaydi. So‘ng sherigi bilan muhokama qiladi. G‘oyalarni guruh bilan baham ko‘radi. Mashq 5 ta ehtimoliy tushuntirish (izoh) ishlab chiqing. Tadqiq qilish uchun eng qiziqarli savolga ovoz bering	**Savol tuzish (Tadqiqot devori) (Inquiry Wall)** Savollarini stikerlarga yozadilar. Ularni quyidagi toifalarga ajratadilar: • Ilmiy • Ijtimoiy • Iqtisodiy • Ekologik	**Tahmin qilish mashqi** Talabalar: Sabablar, oqibatlar yoki yechimlar haqida tahmin qiladilar. O‘z fikrlarini asoslaydilar.
(Tadqiqot bosqichi) tadqiq qilish, tajriba o‘tkazish, ma’lumot to‘plash va tahlil qilish.	**Tadqiqot vazifalari** Guruhlar: 1-guruh: Ekologik ta’sir 2-guruh: Iqtisodiy ta’sir 3-guruh: Inson salomatligi 4-guruh: Ijtimoiy ta’sir Vazifalar: Ma’lumot to‘plash Diagrammalar tuzish Xulosalarni umumlashtirish	**Field Work /Dala tadqiqoti / Kuzatuv** So‘rovnoma o‘tkazish Intervyu olish Real ma’lumotlarni to‘plash Tegishli joyga tashrif buyurish **Mashq:** Qisqa hisobotni tayyorlash	**Tajriba o‘tkazish** Oddiy tajribalar loyihalash Natijalarni jadvalga yozish Tahminlarni natijalar bilan solishtirish	**Ma’lumotlarni tahlil qilish** Grafiklarni tahlil qilish Xulosalar chiqarish Qarama-qarshiliklarni muhokama qilish **Hamkorlikda muammo yechish** Ehtimoliy yechimlar bo‘yicha “aqliy hujum” Afzallik va kamchiliklarni baholash Amalga oshirish imkoniyatiga ko‘ra saralash
(Kashf etish bosqichi) chuqur tushuncha shakllantirish va yechim taklif qilish.	**Konseptual xarita tuzish** Aqliy xarita yarating va quyidagilarni bog‘lang: Sabablar Oqibatlar Manfaatdor tomonlar Yechimlar	**Model yoki prototip yaratish** Model yaratish Prototip yechim ishlab chiqish	**Taqdimot va refleksiya** Natijalarni taqdim etadilar O‘z fikrlarini himoya qiladilar Quyidagilar haqida fikr yuritadilar: Biz nimani kashf etdik? Fikrlashimiz qanday o‘zgardi?	**Harakat rejasi ishlab chiqish** PhenoBL real hayotga ta’sir ko‘rsatishni rag‘batlantiradi. Talabalar: Real jamoaviy harakat taklif qiladilar Bosqichma-bosqich amalga oshirish rejasini tuzadilar Manfaatdor tomonlarni aniqlaydilar

3-jadval

EED texnikasida qo‘llaniladigan metod va texnikalar (jarayonlar)

	Engage stage	Explore	Discover
Metodlar	Izlanishga asoslangan ta’lim Muammoga asoslangan ta’lim Evristik metod Motivatsion metod Induktiv o‘qitish metodi Tajribaviy ta’lim (dastlabki tanishuv)	Izlanishga asoslangan ta’lim (yo‘naltirilgan yoki ochiq) Loyihaga asoslangan ta’lim Hamkorlikda o‘qitish Keys-stadi (holat tahlili) metodi Eksperimental metod Dala tadqiqoti metodi Tadqiqot metodi Kashfiyotli o‘rganish Taqqoslash metodi Tahliliy metod	Reflektiv ta’lim Konstruktivistik metod Dizayn fikrlash yondashuvi Muammo yechish metodi Loyiha metodi Munozara metodi Taqdimot metodi Amaliy tadqiqot Metodi
Texnikalar	Aqliy hujum (Brainstorming) O‘yla–Juftlikda muhokama qil–Ulash (Think–Pair–Share) KWL jadvali (Bilaman–Bilishni xohlayman–O‘rgandim) Savollar oqimi (Question storming) Bashorat qil–Kuzat–Tushuntir (POE) Vizual fikrlash strategiyasi Sokratik savol-javob	Guruhiy tadqiqot Ma’lumot to‘plash va tahlil qilish, So‘rovnoma va intervyu, Kuzatish va qayd etish, Laboratoriya tajribalari “Jigsaw” (bo‘laklab o‘rganish) texnikasi Munozara (debat) Muammo yechish vazifalari Grafik tashkil etish(diagramma, jadval va boshqalar) Manbalarni tahlil qilish Gipotezani sinovdan o‘tkazish	Konseptual xarita tuzish, Model yoki prototip yaratish Portfolio tuzish O‘zaro baholash O‘z-o‘zini baholash Refleksiya kundaligi yozish Expertlar muhokamasi Taqdimot va himoya Yechimlarni saralash SWOT tahlil Harakat rejasini ishlab chiqish

Topshiriqlarni bajarish ularni baholashni ham talab etadi. Shu sababli Blum taksonomiyasi asoslangan, talabalarning quyi hamda yuqori kognitiv darajadagi kognitiv rivojlanish trayektoriyasini belgilab berishga xizmat qiluvchi baholash tizimi ishlab chiqildi. Ushbu baholash tizimi o‘qituvchilar hamda talabalar uchun mo‘ljallangan (4-jadvalga qarang):

Jadvaldan ko‘rinib turibdiki, ushbu baholash tizimi o‘qituvchilarga o‘quvchilarning kognitiv kompetensiyalarini rivojlanish dinamikasini baholash imkonini beradi. Ya’ni, quyi darajadagi kognitiv kompetensiyalardan (bilimni eslab qolish, talabalar mavzuni tushunganligi va mazmunni real hayotiy vaziyatlarda qo‘llay olish darajasi) hamda yuqori darajadagi kognitiv kompetensiyalar, ya’ni, tahlil qilish, baholash, ijodiy fikrlash kompetensiyalarini baholashga xizmat qiladi. Bunda talabalar o‘z g‘oyalarini mantiqiy tarzda yaxlit tarzga keltira olishlari, hodisa bo‘yicha turli nuqtayi nazarlarni taqqoslay olishlari, shuningdek, o‘z qarorlarining to‘g‘riligini isbotlash, xulosalar shakllantirish hamda yetarli dalil va misollar bilan javoblarini asoslash ko‘nikmalari aniqlanadi (4-jadvalga qarang):

4-jadval

Blum taksonomiyasiga muvofiq o‘qituvchilarga mo‘ljallangan yuqori darajadagi kognitiv kompetensiyalarni baholash tizimi

		Blum taksonomiyasi darajalari	Me’zonlari	Ko‘rsatgichlari	Ballar	O‘qituvchi izohi
Quyi darajadagi kognitiv kompetensiyalar	Metakognitiv boshqaruv Muammoni yechishda qaysi strategiya ishlatilishini biladi	Bilim	-Real voqea hodisalarga oid asosiy termin va tushunchalarni eslab qoladi va qo‘llaydi; -Asosiy faktlar va ilmiy tushunchalarni aniq bayon qila oladi.	sanab o‘tadi ta’riflaydi / aniqlab beradi o‘rganilgan ma’lumotni qayta aytib beradi	5	___ /5
		Tushunish	-Ilmiy manbalarni ravshan bayon qiladi; -Mavzuni mantiqiy tushuntiradi; tadqiqot obyekti bo‘yicha ma’lumot va natijalarni to‘g‘ri sharhlaydi.	Tushuntiradi qisqacha bayon qiladi / xulosa qiladi tasniflaydi taqqoslaydi izohlaydi ma’lumotni boshqa so‘zlar bilan qayta ifodalaydi	10	___ /10
		Qo‘llash	-Tadqiqot natijalarini to‘g‘ri qo‘llaydi; -Ilmiy tushunchalardan foydalanadi; -Kontekstdagi tilni to‘g‘ri ishlatadi.	qo‘llaydi foydalanadi jarayon yoki usullarni bajaradi (amalga oshiradi)	10	___ /10
Yuqori darajadagi kognitiv kompetensiyalar		Tahlil	-Murakkab ma’lumotlarni tarkibiy qismlarga ajratadi; -Mazmunni mantiqiy tarzda tuzadi; -Turli ilmiy g‘oyalarni solishtiradi va farqlaydi.	tahlil qiladi / chuqur o‘rganadi farqlaydi tasniflaydi taqqoslab farqlaydi tarkibiy qismlar yoki mantiqiy bog‘lanishlarni aniqlaydi	20	___ /20
		Baholash	- O‘z hukm va fikrlarining to‘g‘riligini isbotlaydi. - Xulosalar chiqaradi va qarashlariga asos keltiradi. - Javobni yetarli va asosli faktlar, dalillar hamda misollar bilan mustahkamlaydi. Ilmiy va real hayotiy manbalarni tanqidiy tahlil qiladi; tanlovlarini asoslaydi va muvozanatli xulosalar beradi.	Ahamiyatini, qiymatini baholaydi tanqid qiladi asoslaydi, isbotlaydi qo‘llab-quvvatlaydi ishonchlilik, samaradorlik va haqiqatlikni baholaydi	25	___ /25
		Ijodkorlik	-Yangi ilmiy tushunchalar yaratadi; -Original, intellektual yoki innovatsion mahsulot ishlab chiqaradi; -Manbalarni ijodiy uyg‘unlashtiradi.	turli manbalar, fanlar yoki qarashlardan olingan g‘oyalarni, nazariyalarni yoki ma’lumotlarni birlashtiradi loyihalashtiradi shakllantiradi tuzadi original modellari yoki takliflarni yaratadi	30	___ /30
		Yakuniy ball			100	___ /100

Dissertatsiyaning uchinchi bobida “Pedagogik tajriba ishlarini tashkil etish va amalga oshirish” deb nomlangan bo‘lib, unda pedagogik tajribalarni tashkil etish maqsad va vazifalari, tajriba natijalarining sifat va miqdoriy ko‘rsatkichlari tahlili, shuningdek, PhenoBL (hodisaga asoslangan ta’lim) yondashuvi asosida bo‘lajak

ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyalarini takomillashtirish bo‘yicha metodik tavsiyalar keltirilgan.

Tajriba-sinov ishlarini o‘tkazish bosqichlari quyidagicha belgilandi:

1. Diagnostika bosqichi – 2022–2023 o‘quv yilining birinchi yarmi.
2. Tashkiliy-tayyorlov bosqichi – 2022–2023 o‘quv yilining ikkinchi yarmi.
3. Amaliy bosqich – 2023–2024 o‘quv yili.
4. Yakuniy bosqich – 2024–2025 o‘quv yilining birinchi yarmi.

Tadqiqot natijalarining ishonchliligi va haqqoniyligini ta’minlash maqsadida tajriba-sinov ishlari quyidagi uchta oliy ta’lim tashkilotlari talabalari bilan o‘tkazildi: Mirzo Ulug‘bek nomidagi O‘zbekiston Milliy universiteti Jizzax filiali, Navoiy davlat universiteti va Samarqand davlat chet tillar instituti.

Dinamik jarayonlar tinglovchilarning belgilangan mezonlar bo‘yicha rivojlanish ko‘rsatkichlariga tayangan holda o‘rganildi (5-jadvalga qarang):

5-jadval

Tajriba sinov uchun tanlangan guruhlardagi talabalar soni va o‘zlashtirish ko‘rsatkichlari

T/r	Semestr	Tajriba guruhi				Nazorat guruhi			
		Talabaning umumiy soni	Yuqori	O‘rta	Past	Talabaning umumiy soni	Yuqori	O‘rta	Past
Mirzo Ulug‘bek nomidagi O’zbekiston Milliy universiteti Jizzax filiali									
1	I	68	30	32	6	70	14	38	18
2	II	68	31	32	5	70	13	38	19
Navoiy davlat universiteti									
1	I	82	32	42	8	84	14	49	21
2	II	82	34	40	8	84	12	48	24
Samarqand davlat chet tillar institute									
1	I	70	29	33	8	76	9	50	17
2	II	70	31	32	7	76	11	47	18
Umumiy I		220	30	36	7	230	12	46	19
Umumiy II		220	32	35	7	230	12	44	20
Umumiy o‘rtacha		73	31	35	7	77	12	45	20

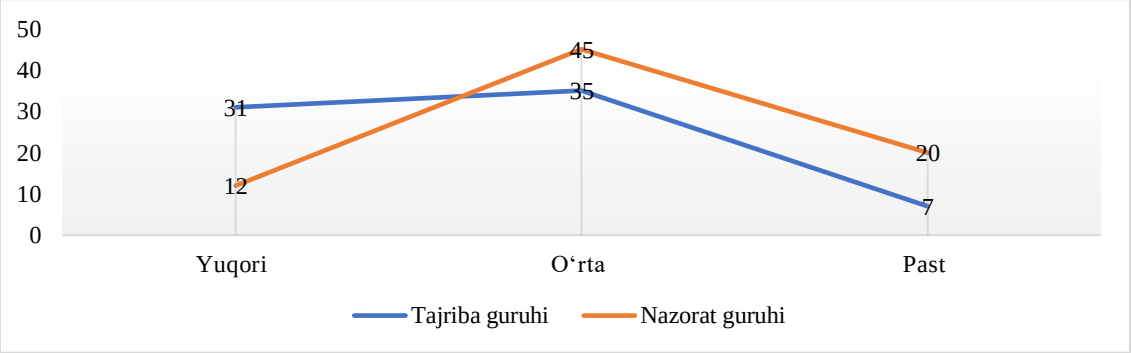
Tajriba-sinov ishlari yakunida nazariy va empirik metodlar asosida zaruriy natijalar aniqlandi. Tadqiqot natijalarining matematik-statistik tahlilini amalga oshirishda Styudent-Fisher mezonidan foydalanildi. Tahlil uchun jadvalda keltirilgan ko‘rsatkichlarning o‘rtacha umumiy qiymati chiqarildi va tegishli hisoblashlar o‘tkazildi (6-jadvalga qarang):

6-jadval

Nazorat va tajriba-sinov guruhlarining tajriba yakunidagi umumiy o‘rtacha ko‘rsatkichlari

Guruhlar	Talaba soni	Javoblari		
		Yuqori	O‘rta	Past
Tajriba guruhi	73	31	35	7
Nazorat guruhi	77	12	45	20

Bu tanlanmalarga mos kelgan poligonlarni chizamiz (7-rasmga qarang) :



7-rasm. Tajriba va nazorat guruhlarining qiyoslama ko‘rsatkichlari

Poligonda qayd etilgan grafiklaridan anglanadiki, tajriba va nazorat guruhlari uchun tanlanma modal qiymatlari mos ravishda M_t=5 va M_n=3, ya’ni ular orasidagi farq yetarli darajada bo‘lib, $M_t > M_n$ ekan. Bu esa, o‘z navbatida, bu tanlanmalar uchun mos o‘rta qiymatlar ham X > Y shartlarni qanoatlantirishini oldindan ko‘rsatadi. Ularni quyidagi formula asosida hisoblaymiz:

$$\bar{X} = \frac{1}{m}\sum_{i-1}^{3} m_i X_i = \frac{1}{73}(31 \cdot 5 + 35 \cdot 4 + 7 \cdot 3) = \frac{1}{73}(155 + 140 + 21) = \frac{316}{73}$$

$$= 4{,}32 \approx 4{,}3$$

$$\bar{Y} = \frac{1}{n}\sum_{j-1}^{3} n_j Y_j = \frac{1}{77}(12 \cdot 5 + 45 \cdot 4 + 20 \cdot 3) = \frac{1}{77}(60 + 180 + 60) = \frac{300}{77}$$

$$= 3{,}896 \approx 3{,}9$$

Demak, tajriba guruhida o‘rtacha o‘zlashtirish nazorat guruhidagidan katta ekan: $\overline{X} > \overline{Y}$.

Har ikki guruh uchun tarqoqlik koeffitsientlarini hisoblaymiz. Shu maqsadda dastlab tanlanma dispersiyalarni hisoblaymiz:

$$D_m = \sum_{i-1}^{3} \frac{m_i(x_i - \bar{X})^2}{n-1} = \frac{31(5-4{,}3)^2 + 35(4-4{,}3)^2 + 7(3-4{,}3)^2}{72}$$

$$= \frac{31 \cdot 0{,}49 + 35 \cdot 0{,}04 + 7 \cdot 1{,}69}{72} = \frac{15{,}19 + 1{,}4 + 11{,}83}{72} = \frac{28{,}42}{72}$$

$$\approx 0{,}39$$

$$D_n = \sum_{j-1}^{3} \frac{n_j(y_j - \bar{Y})^2}{76} = \frac{12(5-3{,}9)^2 + 45(4-3{,}9)^2 + 20(3-3{,}9)^2}{76}$$

$$= \frac{12 \cdot 1{,}21 + 45 \cdot 0{,}01 + 20 \cdot 0{,}81}{76} = \frac{14{,}52 + 0{,}45 + 16{,}2}{76} = \frac{31{,}17}{76}$$

$$\approx 0{,}41$$

Bizga ma’lum $\bar{X}$=4,3, $\bar{Y} = 3{,}9, \delta_m = 0{,}14, \delta_n = 0{,}16$ ga teng.

Bundan sifat ko‘rsatgichlari:

$$K_{usb} = \frac{(\bar{X} - \delta_m)}{(\bar{Y} - \delta_n)} = \frac{4{,}3 - 0{,}14}{3{,}9 + 0{,}16} = \frac{4{,}16}{4{,}06} = 1{,}02 > 1;$$

$$K_{bdb} = (\bar{X} - \delta_m) - (\bar{Y} - \delta_n) = (4{,}3 - 0.14) - (3{,}9 - 0.16) = 4{,}16 - 3{,}74$$

$$= 0{,}42 > 0.$$

Olingan natijalardan o‘qitish samaradorligini baholash mezoni birdan kattaligi *($K_{usb}=1,02>1$)* va bilish darajasini baholash mezoni noldan kattaligini *($K_{bdb}=0,42>0$)* ko‘rish mumkin. Bundan ma’lumki, tajriba guruhlari ko‘rsatkichlari nazorat guruhdagilaridan yuqori miqdorga ega.

Ushbu o‘zlashtirish ko‘rsatkichlarini foizlarda hisoblaymiz:

$$\frac{\bar{X}}{3}\cdot 100\% - \frac{\bar{Y}}{3}\cdot 100\% = \frac{4,3}{3}\cdot 100 - \frac{3,9}{3}\cdot 100 = \frac{40}{3} = 13,3\%$$

Tadqiqot davomida tajriba-sinov sifatida olingan o‘zlashtirish ko‘rsatkichlari ham tahlil qilindi va Mirzo Ulug‘bek nomidagi O‘zbekiston Milliy universiteti Jizzax filiali, Navoiy davlat universiteti va Samarqand davlat chet tillar institutlarida tanlab olingan tajriba guruhini ko‘rsatkichi nazorat guruhinikiga nisbatan 13,3 % ga oshganligi aniqlandi.

Demak, yuqorida keltirilgan statistik tahlillar bo‘lajak ingliz tili mutaxassislarining kognitiv kompetensiyalarini “PhenoBL” ta’lim yondashuvi asosida takommilashtirish tizim samaradorligi va natijadorligini oshiradi, degan farazning tajriba-sinov natijalariga ko‘ra, tasdiqlanganligini e’tirof etish mumkinligiga asos yaratadi.

XULOSALAR

“Bo‘lajak ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyalarini “PhenoBL” ta’lim yondashuvi asosida takomillashtirish” mavzusi doirasida olib borilgan kompleks nazariy tahlil, pedagogik tajriba-sinov ishlari hamda ularning matematik-statistik tahlili natijalari ilgari surilgan ilmiy farazlarning asoslanganligini tasdiqladi va quyidagi umumiy xulosalarni chiqarishga imkon berdi:

1. Tadqiqot O‘zbek PhenoBL yondashuvi orqali bo‘lajak ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyalarini rivojlantirishning dolzarbligi va ahamiyatini, shuningdek, ularning analitik, baholovchi, kreativ, metakognitiv, tanqidiy fikrlash, qaror qabul qilish, muammolarni hal qilish va mustaqil o‘rganish ko‘nikmalarini oliy ta’lim kontekstida shakllantirish zarurligini isbotladi.

2. O‘zbek PhenoBL modeli, ingliz tili o‘qituvchilarini tayyorlash dasturlari uchun o‘quv rejalari, modul syllabusi va malaka talablarini tahlil qilishga asoslangan holda, mavjud ta’lim resurslaridan oqilona foydalanishni ta’minlaydi va talabalarning o‘rganishini Malaka Talablari doirasida samarali tashkil qiladi.

3. O‘zbek PhenoBL modelini ingliz tili o‘qituvchilari tayyorlash dasturlariga integratsiyalashning metodologik asoslari ishlab chiqildi; bunda modelning pedagogik funksiyalari, shuningdek modul mazmuni, baholash mezonlari va o‘quv natijalari hisobga olindi.

4. Eksperimental sinovlar natijalariga ko‘ra, tajriba guruhlarida o‘rtacha ko‘rsatkich 4.3, nazorat guruhlarida esa 3.9 bo‘ldi. Bu PhenoBL yondashuvi orqali HOCC rivojlanishi bo‘yicha tajriba guruhlarida nazorat guruhlariga nisbatan 13,3% o‘sish kuzatilganini ko‘rsatadi.

5. Konstruktivizm, ijtimoiy konstruktivizm, emergent learning va situated cognition nazariy konsepsiyalarini integratsiyalash orqali yaratilgan uch fazali EED (Engage, Explore and Discover) pedogogik texnologiyasining analitik, baholovchi, kreativ va metakognitiv komponentlari, shuningdek, bo‘lajak ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyalarini bosqichma-bosqich rivojlantirish samaradorligi ilmiy jihatdan isbotlandi.

6. “O‘zbek PhenoBL” ta’lim modelining **“**Loyiha asosida o‘qitish”, “Muammoli vaziyatlarda o‘qitish”, “Tadqiqot va izlanishga oid o‘qitish”, “Fanlararo o‘qitish”, “Metakognitiv”, “Hamkorlik va jamoaviy”, “Raqamli va aralash”, “Baholashning shakllantiruvchi va xulosalovchi” usullariga tayanuvchi didaktik mexanizmining integratsiyasi talabalarning analitik fikrlash, tanqidiy tahlil, fanlararo izlanish, hamkorlikda ishlash va o‘z-o‘zini baholash orqali o‘quv jarayonini didaktik jihatdan rivojlantirishning samarali vositasi ekanligi amaliy jihatdan isbotlandi.

7. PhenoBL ta’lim yondashuvi tamoyillari va Cambridge International AS & A Level Thinking Skills dasturi asosida shakllantirilgan “O‘zbek PhenoBL” modeli talabalarning mustaqil tadqiqot qilish qobiliyatlarini rivojlantiruvchi interdisiplinar komponenti, shuningdek, talabaga yo‘naltirilgan, amaliyotga asoslangan ta’lim va uzluksiz ta’lim konsepsiyalarini ilgari surishi ilmiy jihatdan isbotlandi.

8. PhenoBL elektron platformasi tarkibidagi e-HOCC jurnali, EED (Engage, Explore and Discover) texnikasi asosida yaratilgan va talabalarning mustaqil ta’limini nazorat qiluvchi vosita sifatida, talabalarning transversal-kognitiv, metakognitiv, ijtimoiy, kommunikativ va raqamli kompetensiyalarini rivojlantiradi va ularning kognitiv rivojlanish trayektoriyasini University 4.0 modeli talablariga muvofiq belgilashini empirik jihatdan isbotladi.

TAKLIF VA TAVSIYALAR

Nazariy, metodologik va eksperimental tadqiqotlarga asoslanib, bo‘lajak ingliz tili mutaxassislarining yuqori darajadagi kognitiv kompetensiyalarini rivojlantirish maqsadida PhenoBL yondashuvini muvaffaqiyatli integratsiyalash bo‘yicha quyidagi tavsiyalar ishlab chiqilgan:

1. Ikkinchi kursning birinchi va ikkinchi semestrlarida “Integrated Language Skills” moduli doirasida O‘zbek PhenoBL modelini joriy etish;

2. Model samaradorligiga erishish maqsadida vazifalar va topshiriqlar modul mazmuni hamda “Integrated Language Skills” modulining mustaqil ishlari bilan uyg‘unlashtirish tavsiya etiladi.

3. Yuqori darajadagi kognitiv kompetensiyalarni rivojlantirish vositasi sifatida fanlararo o‘qitishni integratsiyalash tavsiya etiladi. Bu orqali talabalar real hayotiy fenomenlarni bir nechta fan nuqtai nazaridan tahlil qilganda tanqidiy fikrlash ko‘nikmalarini takomillashtiradilar.

4. Talabalar yuqori darajadagi kognitiv kompetensiyalarini rivojlantirish uchun EED (Engage–Explore–Discover) pedagogik texnologiyasini oliy ta’lim o‘quv dasturlariga integratsiyalash tavsiya etiladi; bunda fenomen asosida o‘rganish, tadqiqotga yo‘naltirilgan o‘rganish, bilimni sintez qilish va shakllantiruvchi baholash usullari qo‘llaniladi.

SCIENTIFIC COUNCIL PhD.03/2025.27.12. Ped.37.01 ON AWARDING SCIENTIFIC DEGREES AT SAMARKAND STATE INSTITUTE OF FOREIGN LANGUAGES

SAMARKAND STATE INSTITUTE OF FOREIGN LANGUAGES

DUSHANOVA NARGIZA MAMATKULOVNA

THE IMPROVEMENT OF HIGHER-ORDER COGNITIVE COMPETENCES OF FUTURE ENGLISH LANGUAGE SPECIALISTS BASED ON THE PHENOBL APPROACH

13.00.02 – Theory and Methodology of Education and Upbringing (English language)

ABSTRACT
of the doctoral thesis (PhD) on pedagogical sciences

Samarkand – 2026

The theme of the dissertation of the Doctor of Philosophy (PhD) on pedagogical sciences was registered by the Supreme Attestation Commission under the Ministry of Higher Education, Science and Innovations of the Republic of Uzbekistan under number B2025.1.PhD/Ped8171.

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Scientific supervisor:	**Tukhtasinov Ilhomjon Madaminovich** Doctor of Pedagogical Sciences (DSc), professor
Official opponents:	**Sabirova Gulnoza Sadikovna** Doctor of Pedagogical Sciences (DSc), Associate professor
	Normatova Nurjamol Normatovna Doctor of Philosophy (PhD) in Pedagogical Sciences, Associate Professor
Leading organization:	**Karshi state university**

The defense of dissertation will take place on «____» _____ 2026 at _____ at the meeting of the Scientific Council PhD.03/2025.27.12.Ped.37.01 on awarding of scientific degrees at Samarkand State Institute of Foreign Languages (Address: 140117, Samarkand city, 43, Gagarin Street. Tel: (99866) 233-78-43; Fax (99878)210-00-18, e-mail: info@samdchti.uz.

The dissertation can be reviewed in the Information Resource Center of Samarkand State Institute of Foreign Languages (Registration number _____). Address: 140117, Samarkand city, 43 Gagarin Street. Tel: (99866) 233-78-43.

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(Protocol of the register No. _____ on «____» _____ 2026 y).

U.U. Jumanazarov
Chairperson of the Scientific Council on awarding academic degrees, Doctor of pedagogical sciences (DSc), Professor

A.E. Rustamova
Scientific Secretary of the Scientific Council on awarding scientific degrees, Doctor of pedagogical sciences (DSc), Associate professor

A.Y. Nurmuratov
Chairperson of the scientific seminar at the Scientific Council on awarding scientific degrees, Doctor of Philosophy (PhD) in pedagogical sciences, Associate Professor

INTRODUCTION (abstract of PhD thesis)

The topicality of the research and its necessity. In the global context, higher education systems face the task of forming a new model, University 4.0 that meets the demands of digital transformation, the knowledge economy, and an innovative society. The key characteristic of this model is its focus not only on providing theoretical knowledge, but also on developing higher-order cognitive competences in students, such as critical thinking, problem-solving, creativity, and decision-making skills. Within the framework of the University 4.0 model, integrating the educational process with real-life contexts, overcoming disciplinary boundaries, and applying innovative teaching approaches are of crucial importance. From this perspective, the phenomenon-based learning approach (PhenoBL) is considered an effective mechanism for developing higher-order cognitive competences. The PhenoBL approach prepares students to analyze and evaluate complex problem situations and to generate creative solutions, while also enabling them to apply knowledge critically in various contexts. The development of real-life problem-solving competences through PhenoBL is closely connected with the theoretical foundations and practical requirements of the University 4.0 model and is recognized as one of the priority directions for modernizing contemporary education.

In global educational practice, phenomenon-based learning (PhenoBL) is widely implemented as an innovative approach. In particular, the Finnish education system has successfully integrated PhenoBL into national curricula, achieving effective development of higher-order cognitive competences such as critical thinking, analysis, evaluation, and creative thinking. This experience clearly demonstrates the potential of the PhenoBL approach in fostering interdisciplinary integration, systematic exploration of real-world phenomena, and the formation of learners as independent and creative thinkers. The interdisciplinary nature of this approach enables students to establish connections across different fields of knowledge and to organize learning in a contextual and flexible manner. Therefore, PhenoBL is relevant not only for general education systems but also plays a significant role in shaping the University 4.0 model, being regarded as one of the key mechanisms for modernizing contemporary education.

During the years of Uzbekistan's independence, the construction of the foundations of the Third Renaissance has positioned the modernization of the higher education system as a pressing issue[23]. This process primarily requires the formation of the University 4.0 model, which emphasizes the development of higher-order cognitive competences among students. From this standpoint, the phenomenon-based learning (PhenoBL) approach gains particular importance as an effective mechanism, tool and method for fostering interdisciplinary integration and real-life problem-solving competences. The implementation of this approach in foreign language teaching is emerging as a relevant theoretical and practical scientific necessity.

[23]Presidential Decree of the Republic of Uzbekistan No. PF-5847 of October 8, 2019, "On the Concept for the Development of the Higher Education System of the Republic of Uzbekistan up to 2030."

Decrees of the President of the Republic of Uzbekistan №. PF-5847 dated October 8, 2019, “On approval of the Concept for the development of the higher education system of the Republic of Uzbekistan until 2030”, №. PQ-3151, dated July 27, 2017, “On measures to further expand the participation of sectors and branches of the economy in improving the quality of training specialists with higher education”, №. PQ-2909 dated April 20, 2017, “On measures for the further development of the higher education system ”, to increase the spiritual and moral content of higher education, to inculcate in students and young people the spirit of loyalty to the ideas of independence, №. PQ-5117 dated May 19, 2021, Resolutions “On measures to bring the popularization of foreign language learning in the Republic of Uzbekistan to a qualitatively new level”, Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated May 18, 2017, №. 292 “ On measures to organize the activities of newly established scientific organizations of the Academy of Sciences of the Republic of Uzbekistan”, Resolution №. 610 dated August 11, 2017 “On measures to further improve the quality of teaching foreign languages in educational institutions”, Resolution №. 816 of October 10, 2018 "On providing higher education institutions with educational literature". This dissertation research will serve to a certain extent in the implementation of the tasks outlined in other regulatory and legal documents related to this activity.

Relevance of the theme of the dissertation to priority directions of science and technology development in Uzbekistan. This dissertation research was carried out within the framework of the priority direction of development of science and technology of the republic I. “Formation of a system of innovative ideas and ways of their implementation in the social, legal, economic, cultural, spiritual, and educational development of an informatized society and a democratic state.”

Problem development status. In Uzbekistan, the issues of foreign language teaching have been investigated by such scholars as I.M.Tukhtasinov, J.J.Jalolov, G.Kh.Bakieva, L.T.Akhmedova, T.K.Sattorov, M.Djusupov, D.U.Khoshimova, U.U.Jumanazarov, A.E.Rustamova, A.Ya.Nurmuratov[24] and others.

Issues of cognitive development have been investigated by national scholars L.R.Zaripov, G.A.Amanova, A.A.Ibragimov, B.R.Adizov, and D.B.Mirboboyeva[25], who have made a significant contribution to the development of this field.

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[24]Tukhtasinov I.M. Discursive approach in the training of translators //Mat. International scientific and creative forum" Youth in science and culture of the XXI century". Chelyabinsk: Chelyabinsk State Institute of Culture. – 2017. – C. 229-231.; Жалолов Ж. Чет тил ўқитиш методикаси. – Т., 2012. – 432б; Bakiyeva Kh.G. Tukhtasinov I.M. Expressing Stylistic devices in Compound Words //Eastern European Scientific Journal. Ausbage. – 2018. – C. 49-55.; Ахмедова Л.Т. Роль и место педагогических технологий в профессиональной подготовке студентов. – Ташкент: Фан ва технология, 2009. – 160 с.; Сатторов Т. Бўлажак чет тили ўқитувчисининг услубий омилкорлигини шакллантириш технологияси (инглиз тили материалида) ТДЮИ. – Т., 2003. − 198 б.; Джусупов М. Билингвальное образование: проблема звуковой и лингвокультурной интерференции. // Вестник РУДН. 2017. №3. – С.351-358.; Хошимова Д.У. Лингводидактические основы изучения лакун в контексте современного функционирования русского языка и межязыковых взаимодействий: Дис. … докт. Пед. наук. – Т., 2007. – 209 с.; Jumanazarov U. U. Speech competence of future english teachers'linguistic tasks //Инновационное развитие: потенциал науки и современного образования. – 2020. – С. 218-220.; Rustamova A.E. The listening comprehension strategies and the aural problems in efl classes //УЧЕНЫЙ XXI ВЕКА. – С. 50.: Nurmuratov A.Ya. Developing the professional competence of english language teachers through grants in the context of international cooperation //tanqidiy nazar, tahliliy tafakkur va innovatsion g ‘oyalar. – 2025. – Т. 1. – №. 5. – С. 350-352.

[25] Zaripov L.R., Amanova G.A. (2024) “Pedagogika oliy ta’lim muassasalarida talabalarni o‘qitish jarayonida kognitiv kompetentsiyalarni rivojlantirish”//Tashkent Medical Academy Volume 4 | TMA Conference | 2023 Integration of

The development of higher-order cognitive competences has been systematically investigated by foreign scholars such as B.S.Bloom, L.W.Anderson, D.R.Krathwohl, R.J. Sternberg, J.H.Flavell, R.H.Ennis, and L.Elder[26].

Cognitive processes, the mechanisms of language and human thinking, as well as the typology and development of cognitive competences in education have been investigated by scholars such as R.P.Millrood, and I.R. Maksimova[27].

The theoretical foundations of the PhenoBL educational approach are grounded in the pedagogical and psychological theories of foreign scholars such as J.Piaget, L.S.Vygotsky, J.Dewey, D.A.Kolb, J.Lave, E.Wenger, J.S.Brown[28], and others.

The application of the PhenoBL educational approach in teaching has been investigated by foreign scholars such as P.Sahlberg, P.Silander, P.Mattila, V.Symeonidis, J.F.Schwarz, D.L.Fields, T.J.Kennedy, H.P.Nguyen, K.Lonka, and S.Adipat[29]. The use of phenomenon-based learning in foreign language teaching has been investigated by scholars from CIS countries, including T.S.Makarova, E.E.Matveeva, M.A.Molchanova, and E.A.Morozova and A.S.Beloborodov[30].

Science, Education and Practice in Modern Psychology and Pedagogy: Problems and Solutions 2023.B. 369-373; D. Ibragimov A.A. Pedagogik ta'limda kognitiv texnologiyalarni qo'llashning nazariy asoslari. Kognitiv va neyropedagogik tadqiqotlarning ta'lim amaliyotiga tatbig'i. Xalqaro ilmiy - amaliy konferensiyasi materiallari. – Samarqand viloyati PYMO'MM, 2024 -680 b.; Adizov B.R. O'qituvchi faoliyatida kognitiv kompetensiyaning o'rni //tanqidiy nazar, tahliliy tafakkur va innovatsion g 'oyalar. – 2025. – т. 1. – №. 1. – с. 28-33.; Mirbabayeva D.B. Fransuz tili darslarida o'quvchilarning kognitiv kompetensiya va bilish qobiliyatlarini rivojlantirish usullari //pedagogik islohotlar va ularning yechimlari. – 2025. – т. 12. – №. 02. – с. 139-140.

[26] Bloom B. S. et al. Handbook I: cognitive domain //New York: David McKay. – 1956. – С. 483-498.; Krathwohl D.R. A revision of Bloom's taxonomy: An overview //Theory into practice. – 2002. – Т. 41. – №. 4. – С. 212-218.; Sternberg R. J., Sternberg K., Mio J. Cognitive psychology. – Belmont, CA: Wadsworth, 2009. – С. 25-29.; Flavell J.H. Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry //American psychologist. – 1979. – Т. 34. – №. 10. – С. 906.; Ennis R.H. A logical basis for measuring critical thinking skills //Educational leadership. – 1985. – Т. 43. – №. 2. – С. 44-48.; Elder L. Critical thinking and emotional intelligence //Inquiry: Critical thinking across the disciplines. – 1996. – Т. 16. – №. 2. – С. 35-49.;

[27]Millrood R., Maksimova I. Cognitive skills in education: typology and development //Язык и культура. – 2018. – №. 42. – С. 137-151.

[28]Piaget J. Piaget's theory //Piaget and his school: A reader in developmental psychology. – Berlin, Heidelberg: Springer Berlin Heidelberg, 1976. – С. 11-23.; Vygotsky L. S. Thought and language. – MIT press, 2012. – Т. 29.; Dewey J. Experience and education //The educational forum. – Taylor & Francis Group, 1986. – Т. 50. – №. 3. – С. 241-252.; Kolb D. A. Experiential learning: Experience as the source of learning and development. – FT Press, 2014.; Lave J. Cognition in practice: Mind, mathematics and culture in everyday life. – Cambridge University Press, 1988.; Wenger E. et al. Communities of practice: Learning as a social system //Systems thinker. – 1998. – Т. 9. – №. 5. – С. 2-3.; Brown J. S., Collins A., Duguid P. Situated cognition and the culture of learning //1989. – 1989. – Т. 18. – №. 1. – С. 32-42.

[29]Sahlberg P. Finnish schools and the global education reform movement //Flip the system. – Routledge, 2015. – P. 162-177; Silander P. et al. Learning Computational Thinking in Phenomena-Based Co-creation Projects: Perspectives from Finland //Computational thinking education in K-12: Artificial intelligence literacy and physical computing. – MIT press, 2022. – P. 103-119; Mattila P., Silander P. How to create the school of the future: Revolutionary thinking and design from Finland //Finland: Multprint. – 2015; **S**ymeonidis V., Schwarz J. F. Phenomenon-based teaching and learning through the pedagogical lenses of phenomenology: The recent curriculum reform in Finland //Forum Oświatowe. – Uniwersytet Dolnośląski DSW. Wydawnictwo Naukowe DSW, 2016. – Т. 28. – №. 2 (56). – P. 31-47; Fields D., Kennedy T. J. What if… Phenomenon-based learning projects: Augmenting upper and early learning STEM lessons //INTED2020 Proceedings. – IATED, 2020. – С. 88-95.; Nguyen H. P. Phenomenon-based learning in Finnish and Vietnamese upper secondary school curriculum for English as a foreign language. 2018. – P. 130; Lonka K. & Westling S.K. Phenomenon-based Learning. In Lonka K. Phenomenal learning from Finland (1edition). 2018. – P. 172–191.; Adipat S. Transcending traditional paradigms: the multifaceted realm of phenomenon-based learning //Frontiers in Education. – Frontiers Media SA, 2024. – Т. 9. – С. 1346403.

[30] Makarova T.S. et al. Phenomenon-based approach to teaching Russian as a foreign language in the cultural context //European Proceedings of Social and Behavioural Sciences. – 2020. – P. 95; Белобородов А.С. The Method of Phenomenon-Based Learning //Linguistic Education Today: Culture, Communication, and Content and Language Integration. – 2018. – P. 53-57.

An analysis of domestic and foreign scholarly literature indicates that, to date, the issue of developing higher-order cognitive competences among second-year university students studying English within the framework of the PhenoBL educational approach has not been specifically investigated. This gap has served as the rationale for initiating and conducting the present study.

The aim of the research is to improve future English learners' higher-order cognitive competences by implementing a phenomenon-based learning approach at Higher Education institutions.

The tasks of the research:

to scientifically determine the effectiveness of the analytical, evaluative, creative, and metacognitive components of the three-phase pedagogical technology EED (Engage, Explore, and Discover), developed through the integration of the theoretical concepts of constructivism, social constructivism, emergent learning, and situated cognition;

to identify the integration of the didactic mechanism of the "Uzbek PhenoBL" educational model, which is based on project-based learning, problem-based learning, research-based learning, interdisciplinary learning, metacognitive learning, collaborative and team-based learning, digital and blended learning, and formative and summative assessment methods, serves as an effective tool for the didactic development of the learning process by enhancing students' analytical thinking, critical analysis, interdisciplinary inquiry, collaborative work, and self-assessment skills;

to empirically examine the development of students' transversal cognitive, metacognitive, social, communicative, and digital competences, and to determine their cognitive development trajectories, through monitoring students' cognitive development using the e-HOCC journal, which is a component of the phenobl.uz electronic platform;

within the framework of the research, to determine that the "Uzbek PhenoBL" model, developed based on the principles of the PhenoBL educational approach and the objectives of the Cambridge International AS & A Level Thinking Skills programme, contributes to the development of the interdisciplinary component aimed at enhancing students' independent research abilities, as well as promoting the concepts of student-centered learning, practice-based education, and lifelong learning;

based on the obtained results, to develop practical recommendations for applying the PhenoBL approach in the development of higher-order cognitive competences.

The object of the study is the process of developing higher-order cognitive competences through phenomenon-based learning among the second-year students learning English at higher education institutions.

The subject of the research is the content and forms of implementing the Phenomenon-based learning approach to foster future English language teachers' capacity for analytical, evaluative, and creative thinking skills

Research methods. A set of complex methods aimed at researching the adequate state of higher-order cognitive competences was used in the research. They

include theoretical methods: analysis and synthesis, comparative analysis of relevant studies in the field; diagnostic methods: surveys, questionnaires, pre-and post-tests; quasi-experimental methods, statistical data analysis methods, including Student-Fisher analysis.

The scientific novelty of the study is as follows:

the effectiveness of the EED (Engage, Explore, and Discover) three-phase pedagogic technology, designed to progressively develop the high-level cognitive competences of future English language specialists and based on the integration of the theoretical concepts of constructivism, social constructivism, emergent learning, and situated cognition, including its analytical, evaluative, creative, and metacognitive components, has been scientifically substantiated;

it has been practically demonstrated that the integration of the didactic mechanism of the "Uzbek PhenoBL" educational model, which is based on project-based learning, problem-based learning, research-oriented learning, interdisciplinary learning, metacognitive approaches, collaborative and teamwork-based learning, digital and blended learning, as well as formative and summative assessment methods, serves as an effective tool for the didactic development of the learning process by enhancing students' analytical thinking, critical analysis, interdisciplinary inquiry, collaboration skills, and self-assessment abilities;

it has been empirically proven that the e-HOCC journal, included in the PhenoBL electronic platform developed on the basis of the EED (Engage, Explore and Discover) pedagogical technology to monitor students' independent learning, contributes to the development of transversal-cognitive, metacognitive, social, communicative, and digital competences required by the University 4.0 model, while also determining students' cognitive development trajectories;

it has been scientifically proven that the interdisciplinary component of the "Uzbek PhenoBL" model, developed on the basis of the principles of the PhenoBL educational approach and the objectives of the Cambridge AS and A Level Thinking Skills program, develops the concepts of student-centered learning, practice-based education, and lifelong learning by enhancing students' independent research abilities.

The practical outcomes of the research encompass the following:

a PhenoBL-based instructional model, adapted to the Uzbek higher education context, can be implemented in English language teacher education programs to systematically develop analytical, evaluative, creative, and metacognitive competences;

the EED technique has been operationalized into step-by-step teaching procedures, learning tasks, and assessment activities that can be directly applied in Methodology of teaching English, Academic writing, and critical reading modules, and literature courses;

the developed criteria, indicators, and levels of higher-order cognitive competences enable teachers to diagnose students' analytical, evaluative, synthetic, and reflective abilities, identify individual cognitive gaps and strengths;

transparent assessment aligned with learning outcomes can be used for formative, summative, and self-assessment purposes;

students demonstrate improved ability to analyze, evaluate, synthesize, and create the academic contexts by being knowledge constructors, and critically reflect learning progress, learning trajectories by becoming cognitively progressive, moving from reproduction to higher-order disciplinary thinking;

professional development of future English language specialists will be realized as Graduates acquire transferable competences essential for modern teaching, such as Critical and creative thinking, problem-solving in interdisciplinary contexts, reflective teaching practices, and autonomous professional growth. These competences directly support the University 4.0 paradigm and contemporary educational reforms in Uzbekistan;

the integration of the Uzbek model of the PhenoBL approach in an academic context can support the student-centered and competency-based education. Since the developed didactic support aligns with the student-centered learning principles, autonomous and lifelong learning strategies, and competency-based education standards, which, in turn, enable teachers to individualize instruction according to students' cognitive profiles and learning needs;

at an institutional level, the methodological recommendations and digital tools can be integrated into university curricula and used in teacher retraining and in-service professional development programs;

The reliability of the research findings and outcomes is determined by the scientific and methodological validity of the approaches and methods used, obtaining theoretical information from official sources, verifying the representativeness of the results of experimental work using mathematical statistics, implementing proposals in practice, and confirming the results obtained by competent structures.

The scientific and practical significance of the research outcomes. The research strengthens the theoretical basis for developing higher-order cognitive competences in English language teacher education and adapts the PhenoBL approach to the Uzbek higher education context. It clearly defines analytical, evaluative, creative, and metacognitive competences as measurable skills and establishes criteria and levels for assessing them. The study also supports the integration of student-centered and competence-based approaches in teacher preparation and contributes to the modernization of higher education in line with contemporary educational reforms, including the University 4.0 paradigm.

The practical significance of the research is its usefulness in real teaching practice. It offers a ready-to-use PhenoBL-based teaching model with clear procedures, tasks, and assessment tools for English language teacher education. It helps teachers identify students' strengths and weaknesses and use fair, outcome-based assessment. The approach supports the development of higher-order thinking, critical thinking, creativity, and reflective skills, and can be applied in university programs, teacher retraining, and in-service professional development.

Implementation of research results. The scientific conclusions regarding the effectiveness of the EED (Engage, Explore and Discover) three-phase technique—designed to progressively develop the high-level cognitive competences of future English language specialists and created based on the integration of the theoretical

concepts of constructivism, social constructivism, emergent learning, and situated cognition, including its analytical, evaluative, creative, and metacognitive components—were introduced into the educational process of the Department of Foreign Philology, Faculty of Foreign Languages, Karaganda University named after Academician E.A.Buketov (Reference No. 01-2026 dated April 29, 2025 Karaganda University named after Academician E.A.Buketov). As a result, starting from April 29, 2025, this technique has been systematically implemented in teaching the course "English for IELTS." As a result, IELTS instructional materials integrating the PhenoBL approach and aimed at the consistent and systematic development of higher-level cognitive competences were developed and implemented into the educational process.

The scientific conclusions proving that the integration of the didactic mechanism of the "Uzbek PhenoBL" educational model, based on project-based learning, problem-based learning, research-oriented learning, interdisciplinary learning, metacognitive approaches, collaborative and teamwork-based learning, digital and blended learning, as well as formative and summative assessment methods, serves as an effective tool for the didactic development of the educational process by enhancing students' analytical thinking, critical analysis, interdisciplinary inquiry, collaboration, and self-assessment skills, were utilized within the framework of the "English Access Microscholarship Program" project (Reference No. 2829-02, dated December 20, 2024, Samarkand State Institute of Foreign Languages). As a result, students' analytical thinking, critical analysis, interdisciplinary research, teamwork, and self-assessment skills improved, and the effectiveness of the learning process increased, which was practically confirmed.

The scientific conclusions demonstrating that the e-HOCC journal, included in the PhenoBL electronic platform developed on the basis of the EED (Engage, Explore and Discover) technique to monitor students' independent learning, contributes to the development of transversal-cognitive, metacognitive, social, communicative, and digital competences required by the University 4.0 model, and determines students' cognitive development trajectories, were applied in the project "Teaching English for Specific Purposes in Uzbekistan" planned by the U.S. Embassy in Tashkent in 2024 (Reference No. 661-02, dated March 7, 2025, Samarkand State Institute of Foreign Languages). As a result, an effective mechanism for monitoring students' cognitive development trajectories was established, and in accordance with the requirements of the University 4.0 model, students' transversal-cognitive, metacognitive, social, communicative, and digital competences were developed, which practically confirmed the increased effectiveness of independent learning.

The scientific conclusions obtained regarding the "Uzbek PhenoBL" model, developed on the basis of the principles of the PhenoBL educational approach and the objectives of the Cambridge AS and A Level Thinking Skills program, particularly its interdisciplinary component aimed at developing students' independent research abilities and promoting the concepts of student-centered learning, practice-based education, and lifelong learning, were used in preparing the script for the "Assalom, Samarqand!" television program broadcast on June 25, 2024

(Reference No. 01-07/-101, dated March 6, 2025, Samarkand State Institute of Foreign Languages). As a result, the content of the television program highlighted the ideas of student-centered, practice-based, and lifelong learning, and effectively promoted to the wider public the importance of developing students' independent research, critical thinking, and analytical skills.

Approbation of research results. The results of this research were presented at 4 international and 3 republican scientific conferences.

Publication of research results. Under the research theme, 15 articles have been published. There are 8 scientific articles, 5 published in republican journals, 3 in foreign journals, and doctoral dissertations recommended by the Higher Attestation Commission of the Republic of Uzbekistan for the publication of basic scientific results.

Volume and structure of the thesis. The thesis includes an introduction, three chapters, a conclusion, a list of used literature, and appendices. The total volume of the thesis is 159 pages.

THE MAIN CONTENT OF THE DISSERTATION

In the introduction, the relevance and necessity of the research are substantiated, its goals and objectives are defined, the object and subject are described, its alignment with the priority areas of development of science and technology in the Republic is indicated, the scientific novelty and practical results are presented, the scientific and practical significance of the obtained results is revealed, information is provided on the implementation of the research outcomes into practice, the published works, and the structure of the dissertation.

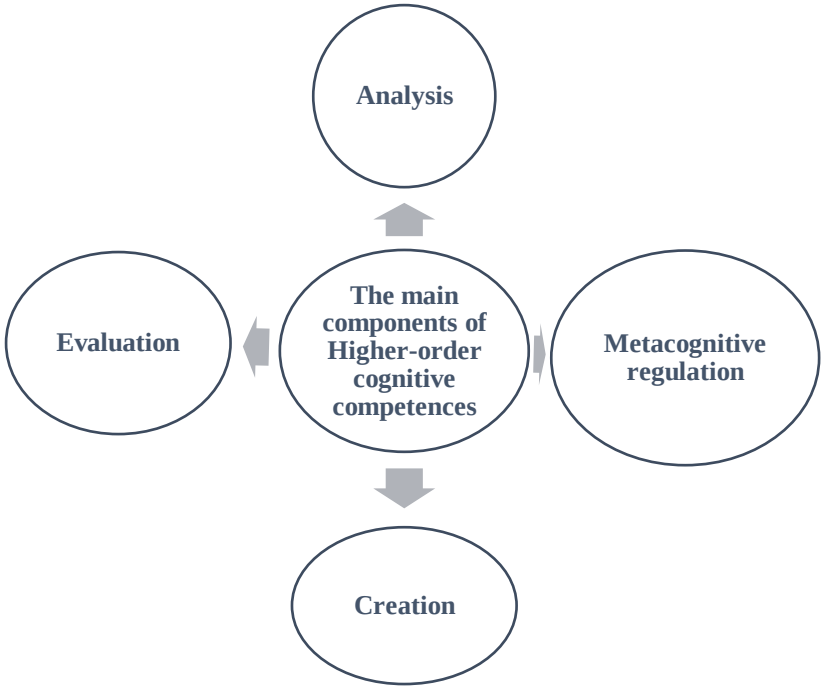
The first chapter of the dissertation is entitled *"*Theoretical foundations of higher-order cognitive competences and the phenomenon-based learning (PhenoBL) approach and the criteria for their development*"*. This chapter presents the definition and nature of Higher-Order Cognitive Competences and their importance in the Context of Higher Education, gives conceptual and theoretical grounding of the Phenomenon-Based Learning Approach, Conceptual and Pedagogical Criteria for the Development of Higher-Order Cognitive Competences and the Preconditions for the Usage of the PhenoBL approach.

The first paragraph of the chapter is entitled "Defining Higher-Order Cognitive Competences and Their Importance in the Context of Higher Education". It defines the cognitive competence, particularly higher-order cognitive competences, discusses what components constitute Higher-order Cognitive Competences, analyses the main features of this phenomenon, and clarifies the reasons behind the development of these in the higher education context.

Competence is considered to be a significant asset of human capital, increasing the productivity of individuals and societies. Thus, the interest in exploration is growing in the field of cognitive competences and the philosophy of cognition in education. How individuals interpret and comprehend reality is determined by the cognitive processes inherent in their minds.

According to R.Maksimova and I.Millroad, cognitive competences are referred to as learners' functional mechanisms enabling a learner to process information, generate new knowledge, create, integrate, and apply the means of addressing situational challenges and problems[31].

The reason we chose the development of cognitive competences in learners rests on the scale of cognitive operations learners perform in their academic studies. Comparatively, more concentration on learners' standardized achievements in tests raises the question of how deeply it is reflected in their cognitive development. The second question derived from this is whether learners' academic output corresponds to the academic learning requirements. It is necessary to emphasize that the improvement of learners' standardized achievements in tests is often the result of building up subject competences rather than cognitive competences in learners[32]. This, in turn, means that the main concentration in academic institutions lies on the improvement of the subject knowledge, underestimating the formation and development of refined intelligence (see the Picture 1):



Picture 1. The main components of Higher-order Cognitive Competences.

These competences are widely recognized in educational research as key components of complex thinking and essential for effective problem-solving and learning in modern contexts. According to recent systematic literature, higher-order cognitive competences involve mental processes that go beyond basic recall to engage learners in analysis and evaluation of information, enabling them to discern patterns, identify relationships, and assess the credibility and relevance of ideas (e.g., problem-solving, critical thinking).

[31] Millrood R., Maksimova I. Cognitive skills in education: typology and development //Язык и культура. – 2018. – №. 42. – С. 137-151.
[32] Finn A. S. et al. Cognitive skills, student achievement tests, and schools //Psychological science. – 2014. – Т. 25. – №. 3. – С. 736-744.

Analysis refers to the ability to decompose complex concepts or tasks into meaningful components, understand the structure and relationships between parts, and interpret information in a logical and systematic way. While the Evaluation involves making informed judgments by comparing information against criteria and evidence, and deciding on strengths, weaknesses, or the best course of action. In educational research, these processes are central to frameworks of higher-order thinking and assessment design that support deep understanding and adaptive learning.

The highest level in the revised taxonomy, creativity is defined as the capacity to produce original, diverse, and useful ideas or solutions. It is increasingly considered a core dimension of higher-order competences and is linked to innovation, problem exploration, and expressive thinking in ways that extend analytical reasoning. Systematic reviews of creativity in learning contexts emphasize its importance for academic and real-world task performance, noting that educational systems increasingly incorporate creative thinking as part of students' cognitive development.

Concerning metacognition, it refers to the awareness and regulation of one's own thinking processes, knowing what, how, and when to use specific strategies to learn, monitor comprehension, and adjust methods for better outcomes. Research shows that metacognitive skills play a critical role in enhancing both analytical and creative aspects of cognition: learners with stronger metacognitive awareness are better able to plan, monitor, and evaluate their thinking, leading to improved problem-solving and adaptive performance across various domains. Even though it has not been included in the Taxonomy levels, it is considered an essential component in the cognitive progression.

Together, these competences are fundamental for developing independent, reflective, and effective learners capable of engaging with complex challenges in higher education and beyond.

The right question appears concerning the time of activation of Higher-order thinking skills. A.King[33] states that it is activated when a learner faces questionable, unfamiliar problems, uncertainties, and dilemmas. From our view, the approach through which we are going to enhance learners' HOCC can be conducive to a problem-solving environment where learners are introduced to real-world challenges.

In the next paragraph, the conceptual and theoretical grounding of the Phenomenon-Based Learning Approach has been discussed. In recent decades, higher education has undergone a significant pedagogical shift from content-transmission models toward learner-centred, inquiry-driven, and competence-oriented approaches. This transformation has been largely driven by the growing demand for graduates who are capable of critical thinking, interdisciplinary problem solving, and the application of knowledge to complex real-world situations. Within this context, the phenomenon-Based Learning (PhenoBL) has emerged as an

[33] King A. Structuring peer interaction to promote higher-order thinking and complex learning in cooperating groups //The teacher's role in implementing cooperative learning in the classroom. – Boston, MA : Springer US, 2008. – C. 73-91.

innovative pedagogical approach that aligns closely with the goals of contemporary higher education. Phenomenon-Based Learning (PhenoBL) is rooted deeply in contemporary constructivist traditions of learning theory, emphasizing active knowledge construction rather than passive reception (see the Table 1):

Table 1

Core Theoretical Foundations of PhenoBL

Theories	Definition	Key ideas	Key Theorists
Constructivism	Learners construct their understanding and knowledge of the world via experiences and make reflections on those experiences, ultimately being the owners of self-constructed knowledge.	Learning is seen as an active, constructive process, built, not passively received. Knowledge is built on prior knowledge.	J. Piaget[34], J.Bruner[35]
Social constructivism	The role of social interaction, language, and culture is necessary in the construction of knowledge. Learning is formed through collaboration and verbal interaction within a cultural context.	Knowledge is constructed through social interaction. The importance of guidance and support (scaffolding) in learning is highlighted in the Zone of Proximal Development.	L.Vygotsky[36]
Situated Cognition	Knowledge is built depending on the context where it is learnt and applied. Learning is regarded as a social activity and is formed in authentic, real-world contexts.	Learning is dependent on contexts and develops well when meaningful activities are provided	J. Lave[37], E.Wenger[38]
Emergent learning	Learning is seen as an unpredictable, non-linear process formed based on the interactions of learners with complex systems, environments.	Knowledge is constructed through exploration, experimentation, and collaboration. It cannot be regulated and is formed through changing conditions.	G.Siemens[39],

[34] Piaget J. Piaget's theory //Piaget and his school: A reader in developmental psychology. – Berlin, Heidelberg: Springer Berlin Heidelberg, 1976. – С. 11-23.
[35] Bruner J. A short history of psychological theories of learning //Daedalus. – 2004. – Т. 133. – №. 1. – С. 13-20.
[36] Vygotsky L., Cole M. Lev Vygotsky: Learning and social constructivism //Learning Theories for Early Years Practice. UK: SAGE Publications Inc. – 2018. – С. 68-73.
[37] Lave J. Situating learning in communities of practice. – 1991.
[38] Wenger E. et al. Communities of practice: Learning as a social system //Systems thinker. – 1998. – Т. 9. – №. 5. – С. 2-3.
[39] Siemens G., Tittenberger P. Handbook of emerging technologies for learning. – Manitoba: University of Manitoba, 2009. – С. 65.

Phenomenon-Based Learning (PhenoBL) is rooted deeply in contemporary constructivist traditions of learning theory, emphasizing active knowledge construction rather than passive reception. At its core, constructivism posits that learners build their own understanding through experience, reflection, and accommodation of new information, as opposed to receiving knowledge transmitted intact from instructors.

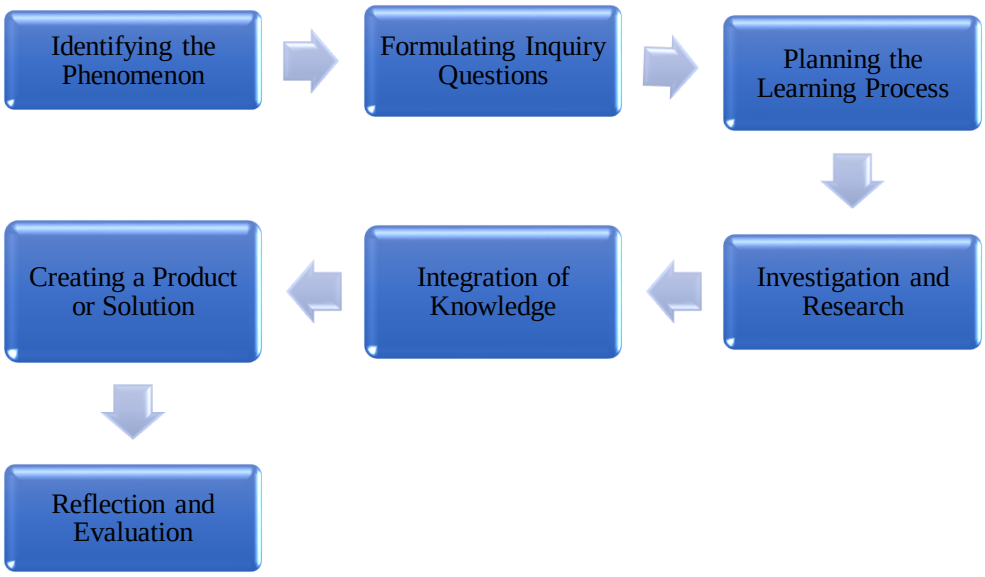
According to the theories of social constructivism, an individual's learning is achieved through interaction with other people. It studies cognitive development and learning that emerges from a necessarily social, collaborative process that could also involve language, history, and social context[40]. Participating people and culture also influence the extension and broadening of social constructivism. Through interaction, a learner may also develop 21st-century skills such as knowledge sharing, critical thinking, and competency to use relevant technologies found in the workplace. Student discussions also play a part in creating the theoretical basis of social constructivism[41]. These studies show how active participation in a group makes thinking visible.

While defining the PhenoBL approach from a pedagogical perspective, its main pedagogical principles should not be left unnoticed. A phenomenon-based classroom is considered to be a learner-centered, interdisciplinary instructional approach that is based on student inquiry and problem-solving. There are five primary principles of phenomenon-based learning as V. Symeonidis[42] classifies: *holisticity, contextualization, problem-based inquiry learning, transformation of the teacher's role, authenticity,* and *the learning process*.

Holisticity in PhenoBL refers to viewing learning and real-world phenomena as integrated, whole systems rather than as isolated parts confined to individual subjects or disciplines. Contextualization: Phenomenon-based learning builds pertinent connections between curriculum theory and the real world, but it also serves to link the various, separate subjects that students learn in Higher Education. Contextualization is the process of situating knowledge, skills, or learning activities within authentic, meaningful, and relevant contexts so that understanding emerges through their connection to real-life situations, social practices, and experiential settings. Problem-based inquiry learning: the phenomenon is studied based on the problem settings that have been collaboratively made and reflected on together by learners. Problem settings are relevant to the learners and to their real world. The setting of problems is a continuous process that guides individual and collaborative knowledge construction during the whole learning process. The learning process is an intentional process of developing hypotheses and working theories (working models, mental prototypes)[43]. This shows that learning is not limited by knowledge

[40] Tryphon A., Voneche J. Working with Piaget: Essays in Honour of Barbel Inhelder. – Psychology Press, 2013.
[41] Gallas K. Talking their way into science: Hearing children's questions and theories, responding with curricula. – Teachers College Press, 1995.
[42] Symeonidis V. Phenomenon-based teaching and learning through the pedagogical lenses of phenomenology: The recent curriculum reform in Finland. – 2016.
[43] Silander P. et al. Learning computational thinking in phenomena-based co-creation projects: Perspectives from Finland //Computational thinking education in K-12: Artificial intelligence literacy and physical computing. – MIT press, 2022. – C. 103-119.

retention. Transformation of the teacher's role. Instead of being the primary source of knowledge, a teacher now acts as a guide who assists students in discovering knowledge on their own. In Phenomenon-Based Learning (PhenoBL), authenticity means that learning is based on real-world phenomena, situations, and practices rather than on isolated subject topics. It goes beyond using simple "real-life examples." Learners use authentic sources, materials, tools, and methods as real experts and professionals. Learning takes place in a real environment rather than in a traditional classroom. Learning community utilizes experts and professionals from various fields. To integrate the PhenoBL approach into the learning process necessitates knowing its educational stages (see the Picture 2):



Picture 2. The stages of the PhenoBL approach

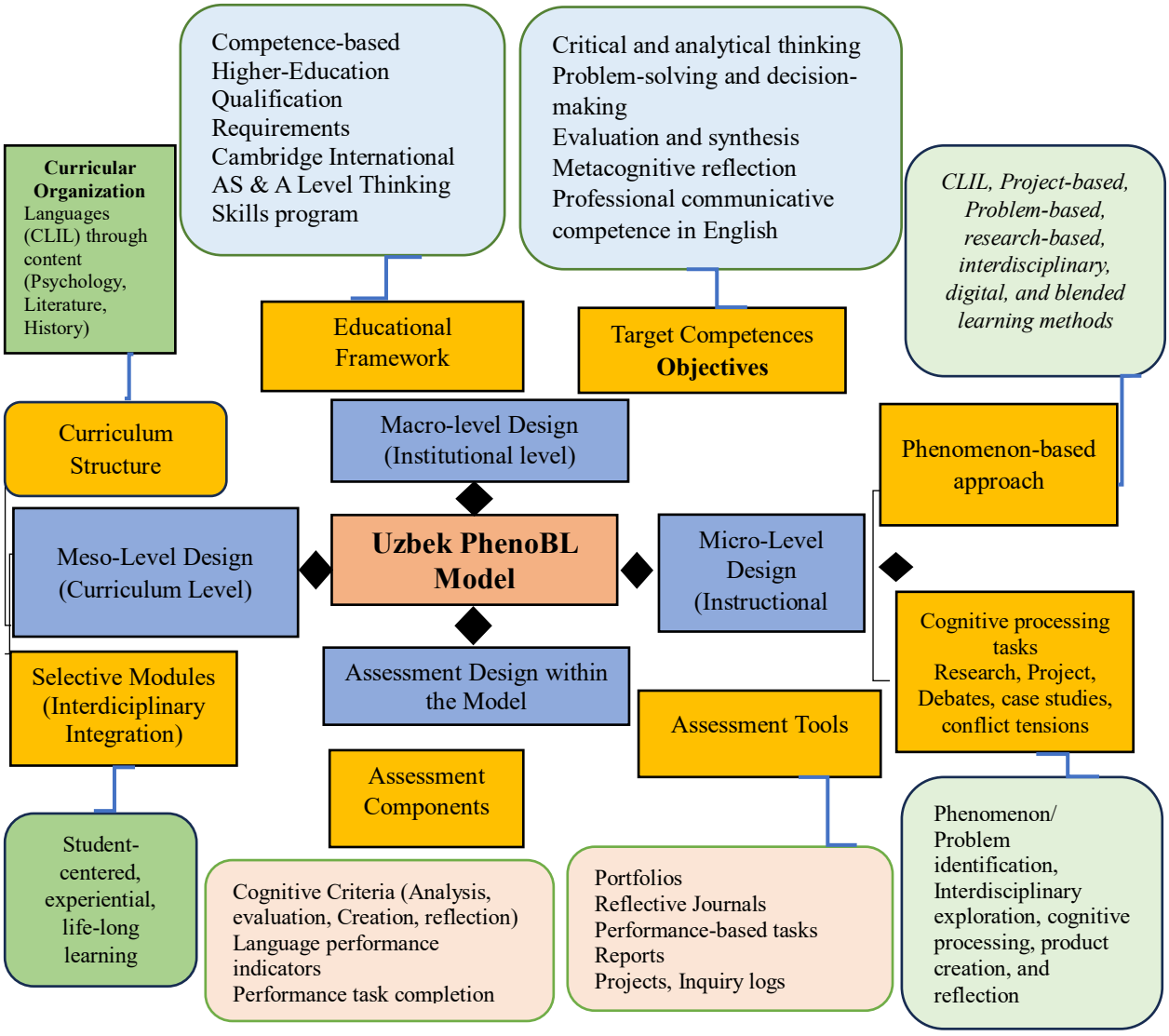
Phenomenon-based learning is grounded on constructivist, interdisciplinary, and problem-oriented inquiry learning processes, which gained international recognition after being introduced through curriculum reform in Finland under the guidance of the Finnish National Agency for Education (2016). Its multi-staged structure is conceptually grounded in constructivism, inquiry-based learning, experiential learning, problem-based learning, systems thinking, and self-regulated learning.

The **second chapter** of the dissertation is entitled "Methodological foundations for developing higher-order cognitive competences through the PhenoBL approach in second-year students at higher education institutions specialized in language teaching". The first paragraph (2.1), Analysis of Qualification Requirements, Study Programs, and Textbooks for 2nd-Course Students at Higher Education, analyzes the qualification requirements, study programs, syllabi, and textbooks of two branches: the Bachelor's degree program in Foreign Language and Literature-60111800: English Language, and 60230100- Philology and Language. Paragraph 2.2 analyzes a holistic framework for integrating the Uzbek Phenomenon-Based Learning Model in the Higher Education Context, and 2.3 explains how Methodological and Didactic Provision for the Development of Higher-Order Cognitive Competences Based on the PhenoBL Approach is integrated in the educational process.

In the process of analyzing the relevant materials, those intended for two branches, it was revealed that the aim of teaching this subject is to provide students with comprehensive instruction in both oral and written forms of the language, to develop their communication skills and linguistic, pragmatic, sociolinguistic competence in various contexts, in particular, to improve their practical and theoretical knowledge of the foreign language being studied, as well as to create opportunities for the free application of the acquired knowledge in professional and academic activities.

The second paragraph proposes the Uzbek PhenoBL model, an adapted version of the Finnish model to integrate it in the Higher education context for the education of future English specialists, and defines the key functions.

The Uzbek PhenoBL model functions as a comprehensive framework that combines learning facilitation, assessment, curriculum integration, cognitive development, and professional skill documentation in one system, promoting both academic and professional excellence (see the Picture 3):



Picture 3. The Cyclical Structure of the Uzbek PhenoBL Didactic Model Aimed at Enhancing the Higher-Order Cognitive Competences of Future English Language Specialists

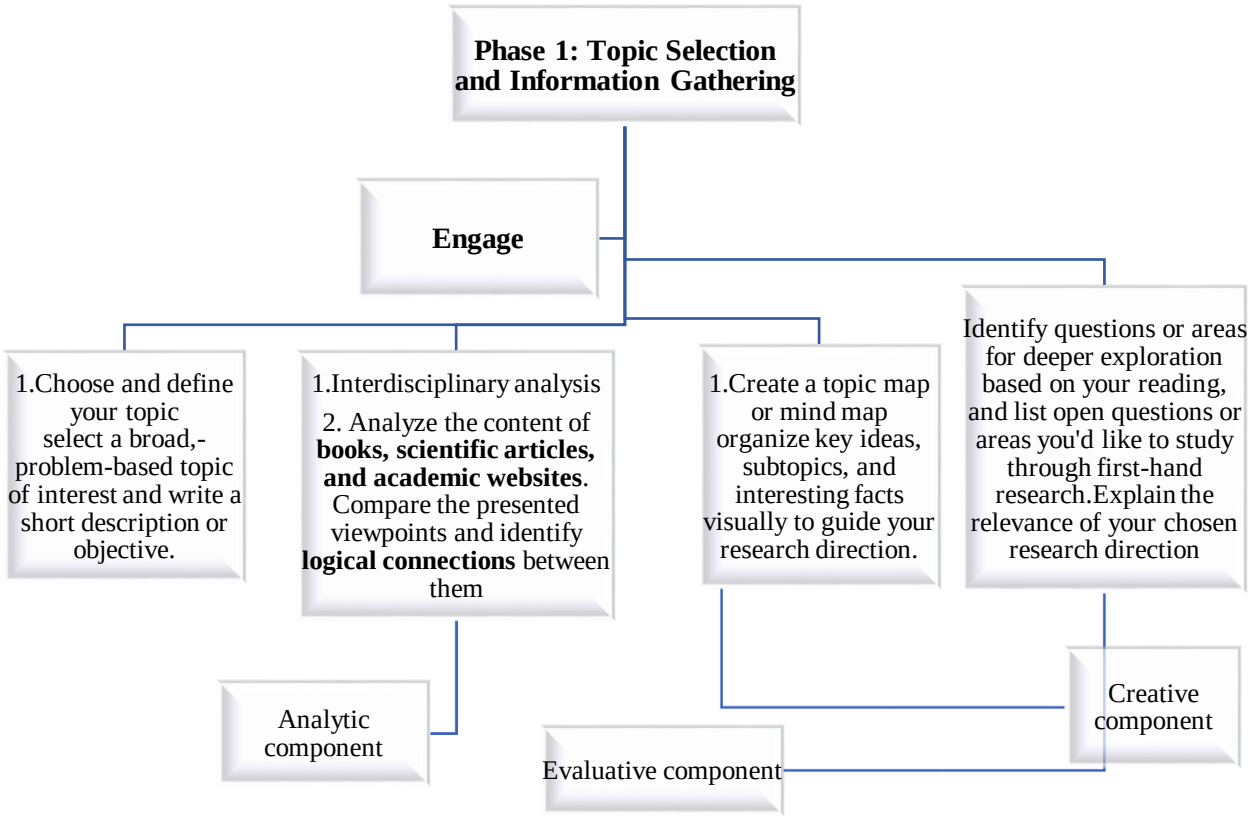
At the institutional level, it aligns with Uzbekistan's national qualification framework and the Cambridge International AS & A Level Thinking Skills programme, focusing on the development of critical thinking, problem-solving, evaluation, synthesis, metacognitive reflection, and professional communication skills in English.

At the curriculum level, modules are organized around subjects such as History, Literature, and Economics, covering topics like globalization, digital education and artificial intelligence, public health communication, climate change, and cultural identity.

At the instructional level, the learning process comprises six phases: introduction of a phenomenon, problem definition, interdisciplinary exploration, cognitive analysis, creation, and reflection. Assessment is criterion-based and conducted through rubrics, portfolios, and performance tasks. Successful implementation of the model requires qualified faculty, a flexible curriculum, digital resources, and institutional support.

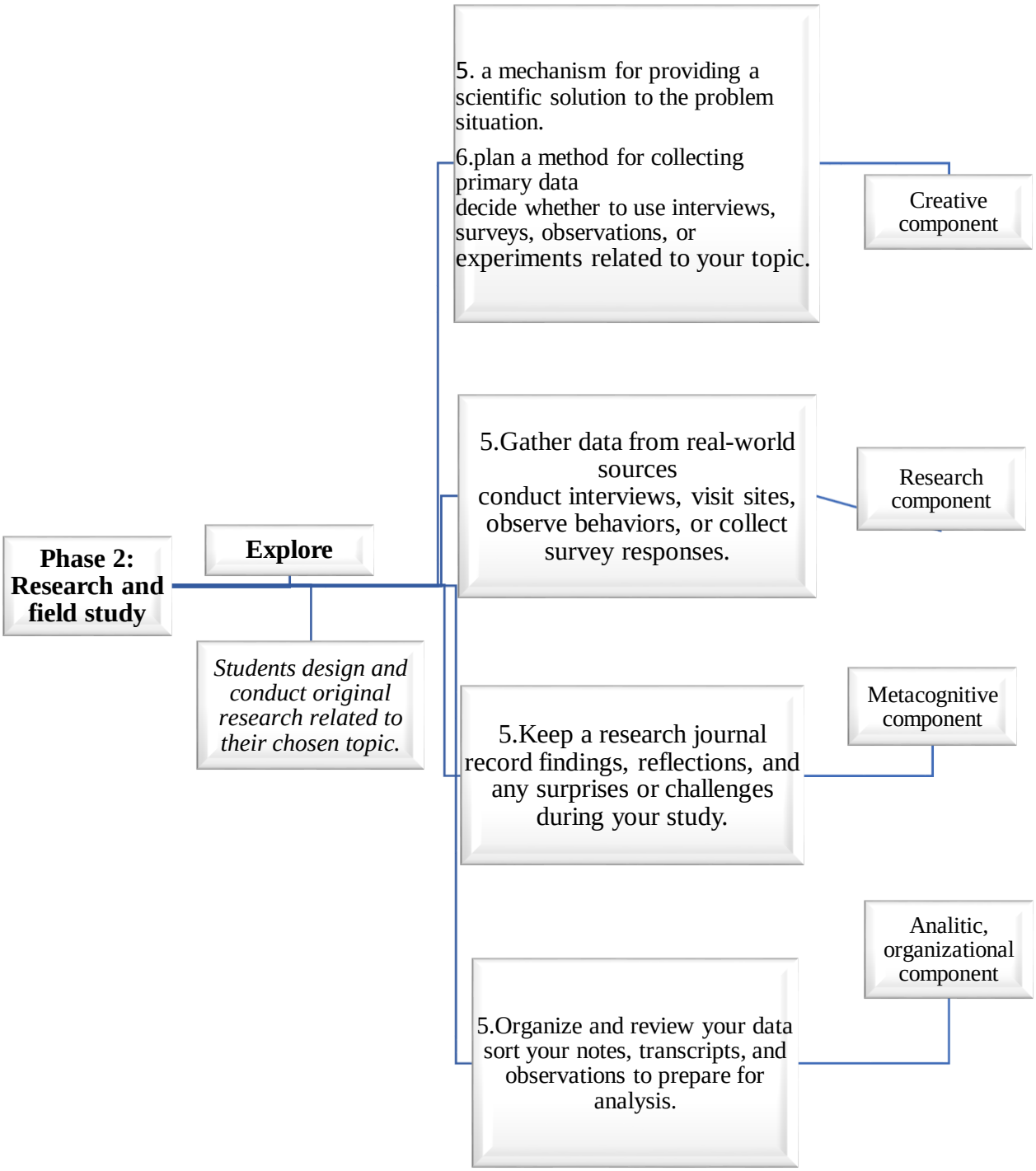
The third paragraph of the second chapter is devoted to the formation of the system of tasks that develop higher-order cognitive competences in second-course students through the PhenoBL approach at language learning institutions.

The pictures 2,3,4 present the stages of integrating the EED (Engage, Explore, and Discover) pedagogic technology to Develop Higher-Order Cognitive competences in Second-Course Students through the PhenoBL Approach at Language Learning Institutions (see the Picture 4):



Picture 4. Engage, Explore, and Discover pedagogic technology integrated in the Independent Work Integrated Language Skills Module

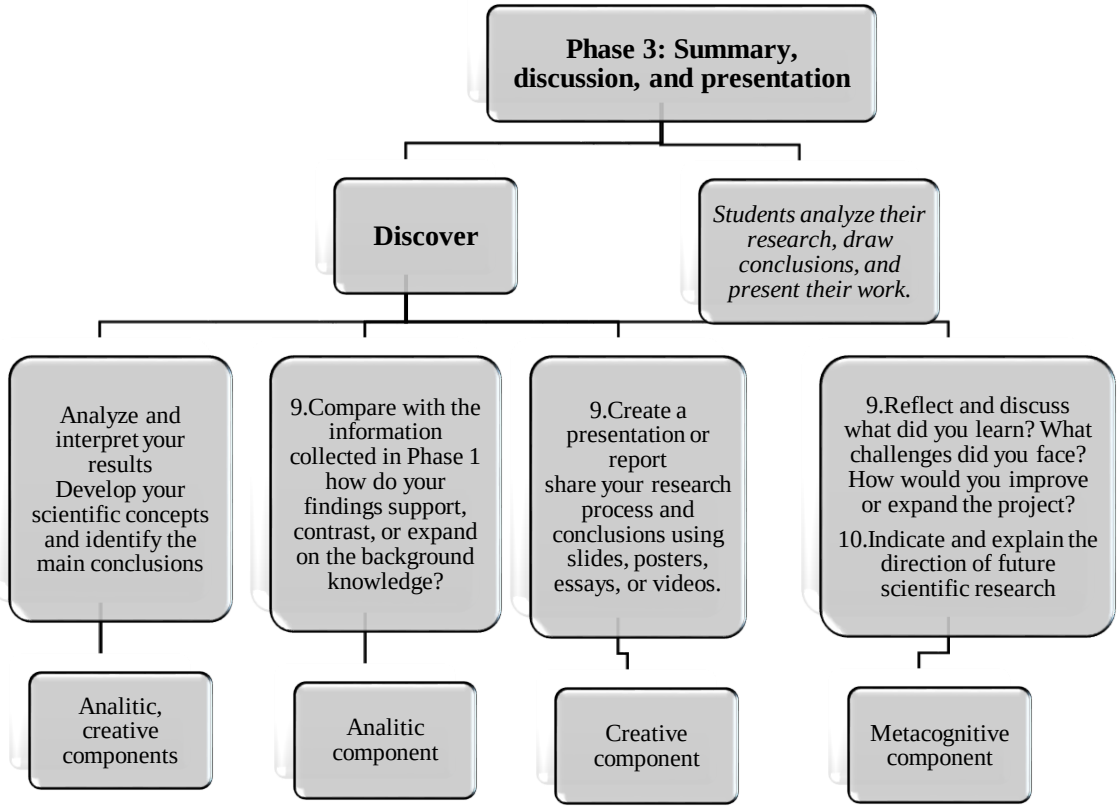
In the first phase of the technique, Students will begin by selecting a general topic that genuinely interests them, such as a hobby, cultural practice, technology, environmental issue, career path, social trend, or historical event. The topic should be broad and not centered on a specific problem. Students should clearly define their chosen topic and write a brief description explaining its focus or purpose (see the Picture 5):



Picture 5. Phase 2: Research and field study

In the second phase of independent learning, Students will design and carry out original research connected to their selected topic. They will begin by planning how to collect primary data, choosing the most appropriate method, such as interviews,

surveys, observations, or experiments, depending on the nature of their topic (see the Picture 6):



Picture 6. Summary, discussion, and presentation

Students will analyze the data they collected, interpret their findings, and draw meaningful conclusions from their research. During this stage, they will examine the results closely to identify patterns, significant insights, or key themes that emerged from their primary data.

They will then compare their findings with the background information gathered in the earlier phase of the project. This comparison will help them determine whether their results confirm, challenge, or extend existing knowledge on the topic.

This self-study activity is designed to help students develop independent learning, research, and critical thinking skills by guiding them through a 12-week exploration of a topic of personal interest. The aim is to engage students in meaningful inquiry, allowing them to take ownership of their learning while building essential academic and life skills.

Throughout the activity, students choose one general topic that interests them and spend the first four weeks gathering background information. They then move into a phase of active research, where they conduct field studies through methods such as surveys, interviews, or observations. In the final phase, students analyze their findings, compare them with their earlier research, and present their conclusions in a clear and structured way.

At the end of their research, a HOCC journal is submitted concerning the researched phenomenon, and an Inquiry Log is recorded as documentation of all processes.

Tasks and exercises assigned in the EED pedagogic technology are the following (see the Tables 2 and 3):

Table 2

Tasks and exercises in EED pedagogic technology

Stages	Task 1	Task 2	Task 3	Task 4
Engage stage Spark curiosity through a real-world phenomenon	**Observation Tasks** Show a short video, image, news clip, or live demo. Ask students to write: What do you notice? What surprises you?	**Think–Pair–Share** Students think individually. Discuss with a partner. Share ideas with class. Exercise: Generate 5 possible explanations. Vote on the most interesting question to investigate.	**Question Generation (Inquiry Wall)** Students: Write questions on sticky notes. Categorize into: Scientific Social Economic Environmental	**Prediction Exercise** Students: Make predictions about causes, effects, or solutions. Justify their reasoning.
Explore stage research, experiment, collect data, and analyze.	**Research Tasks** Group 1: Environmental impact Group 2: Economic impact Group 3: Human health Group 4: Government policies Tasks: Collect data Create charts Summarize findings	**Field Work / Observation** Conduct surveys Interview community members Measure real data Visit a related site Exercise: Create a short field report	**Experimentation** Design simple experiments. Record results in tables. Compare predictions with outcomes.	**Data Interpretation** Analyze graphs Identify patterns Draw conclusions Discuss contradictions **Collaborative Problem-Solving** Brainstorm possible solutions. Evaluate pros and cons. Rank solutions by feasibility.
Discover stage Construct deeper understanding and propose solutions.	**Concept Mapping** Create a mind map connecting: Causes Effects Solutions	**Model or Prototype Creation** Build a model. Design a campaign. Develop a prototype solution. Example: Design a low-cost cooling solution for urban areas. Create an awareness poster or digital campaign.	**Presentation and Reflection** Students: Present findings. Defend their reasoning. Reflect: What did we discover? How did our thinking change?	**Action Plan Development** PhenoBL encourages real-world impact. Students: Propose a realistic community action. Create step-by-step implementation plan. Identify stakeholders.

Table 3

Methods and techniques (procedures) applied in the EED technique

	Engage stage	Explore	Discover
Methods (broader approaches)	Inquiry-based learning Problem-based learning Heuristic method Motivational method Inductive teaching method Experiential learning (initial exposure)	Inquiry-based learning (guided or open) Project-based learning Cooperative learning Case study method Experimental method Field study method Research method Discovery learning Comparative method Analytical method	Reflective learning Constructivist method Design thinking approach Problem-solving method Project method Discussion method Presentation method Action research method
Techniques (classroom Procedures)	Brainstorming Think–Pair–Share KWL chart Question storming Predict–Observe–Explain (POE) Anticipation guide Visual thinking strategy Socratic questioning Storytelling / scenario trigger Concept cartoon discussion	Group investigation Data collection and analysis Survey and interview Observation and recording Laboratory experimentation Jigsaw technique Role play Debate Problem-solving tasks Graphic organizers Source analysis Hypothesis testing	Concept mapping Model/prototype creation Portfolio development Peer assessment Self-assessment Reflection journal writing Panel discussion Presentation and defense Solution ranking SWOT analysis Action plan development

The completion of tasks demands assessment, accordingly. For this reason, we have designed the assessment system based on Bloom's Taxonomy, stating that a learner should be assessed properly, encouraging them to go deeper into learning and long-lasting learning, and showing them their weaknesses and strengths during the learning process. The assessment system has been designed for both teachers and students (see the Table 4):

Table 4

Teachers' Assessment System of Higher-order Cognitive Competences according to Bloom's Taxonomy

Teachers' Assessment System of Higher-order Cognitive Competences according to Bloom's Taxonomy						
		Bloom's Taxonomy orders	Criteria	Indicators	Points	Teachers' comment
Low-order cognitive competences	**Metacognitive Regulation** Knows which strategy to use in problem solving	Knowledge	Remembers and utilizes key terminology and key concepts concerning the real-world phenomena; references basic facts and academic concepts accurately.	Lists, defines, identifies, names Reproduces information as learned	5	___ /5
		Understanding	Summarizes academic sources clearly; explains topic logically; interprets data and findings concerning the researched phenomena correctly.	Explains, summarizes, classifies, compares; Interprets or paraphrases information	10	___ /10
		Application	Applies researched information properly; uses academic concepts; uses correct language in context.	Applies, demonstrates, uses, Executes procedures or techniques	10	___ /10
Higher-order cognitive competences		Analysis	Breaks down complex information; organizes content logically; compares and contrasts different academic ideas	Analyses, differentiates, categorizes, contrasts; Identifies components or logical connections	20	___ /20
		Evaluation	- Proves the correctness of his judgments, reasons, and opinions. - Forms conclusions and gives reasons for one's perspectives. -Justifies the response with sufficient and plausible facts, evidence, and examples. Critically evaluates academic and real-world sources by defending choices and providing balanced conclusions.	Evaluates, critiques, justifies, and defends; Assesses credibility, effectiveness, validity	25	___ /25
		Creativity	Generates new academic concepts, produces original, intellectual, or innovative product; integrates sources creatively.	Combines ideas, theories, or data from different texts, disciplines, or perspectives; Designs, develops, formulates, constructs Produces original models or proposals	30	___ /30
		Final Score			100	___ /100

From the table, it is clear that this assessment system enables teachers to assess learners' progress in terms of cognitive skills starting from lower-order cognitive skills, namely knowledge retention, how well students comprehend the phenomenon and apply content in real world circumstances and finishing with higher-order cognitive competences, specifically concentrating on analytical skills, namely how

logically they organize their ideas into the whole and whether they can compare and contrast different perspectives concerning the phenomenon and to identify capacities in proving correctness of his judgments, formulating conclusions and giving reasons for his opinion and justifying the answer with sufficient facts and examples.

The third chapter, entitled *"Organization and Implementation of Pedagogical Experimental Work,"* presents the objectives and tasks of organizing pedagogical experiments, the analysis of qualitative and quantitative indicators of the experimental results, as well as methodological recommendations for improving higher-order cognitive competences of the future English language specialists based on the *PhenoBL* (Phenomenon-Based Learning) approach. Timing for the implementation of the stages of the training experiment:

1. Diagnostic stage – first half of 2022- 2023 academic year.
2. Organization and Preparation stage - second half of the 2022-2023 academic year.
3. Practical stage- 2023 - 2024 academic year.
4. Final stage – first half of the 2024-2025 academic year.

To ensure the reliability and validity of the research findings, experimental studies were conducted with students from three higher educational institutions: the Jizakh branch of the Mirzo Ulughbek National University of Uzbekistan, Navoi State University, and the Samarkand State Institute of Foreign Languages.

The dynamics were studied based on the development indicators of the established criteria among the listeners (see the Table 5):

Table 5

The number of students in the selected groups for the experimental tests and their achievement indicators.

T/r	Semester	Experimental group				Control group			
		Total number of students	High	Middle	Low	Total number of students	High	Middle	Low
Jizzakh branch of the National University of Uzbekistan named after Mirzo Ulug'bek									
1	**I**	68	30	32	6	70	14	38	18
2	**II**	68	31	32	5	70	13	38	19
Navoiy State University									
1	**I**	82	32	42	8	84	14	49	21
2	**II**	82	34	40	8	84	12	48	24
Samarkand State University of Foreign Languages									
1	**I**	70	29	33	8	76	9	50	17
2	**II**	70	31	32	7	76	11	47	18
Total I		220	30	36	7	230	12	46	19
Total II		220	32	35	7	230	12	44	20
Total average		**73**	**31**	**35**	**7**	**77**	**12**	**45**	**20**

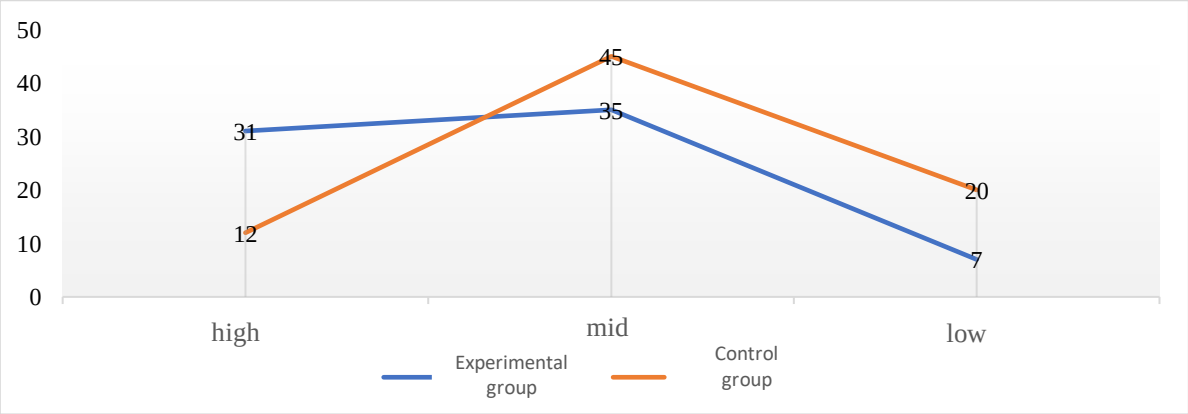
At the end of the experimental testing, the necessary results were determined based on theoretical and empirical methods. The Student-Fisher criterion was used to perform the mathematical-statistical analysis of the research results. The average overall value of the indicators presented in the table was calculated, and the relevant calculations were carried out (see the Table 6):

Table 6

The overall average indicators of the control and experimental groups at the end of the experiment.

Groups	Number of students	Answers		
		High	Mid	Low
Experimental group	73	31	35	7
Control group	77	12	45	20

We will draw the polygons corresponding to these selections (see the Picture 7):



Picture 7. Comparative indicators of the experimental and control groups.

From the graphs recorded in the polygon, it can be inferred that the modal values for the experimental and control groups are M_t=5 and M_n=3, respectively, indicating that the difference between them is significant, with $M_t > M_n$. This, in turn, indicates that the corresponding average values for these selections also satisfy the conditions X > Y. We will calculate them based on the following formula:

$$\bar{X} = \frac{1}{m}\sum_{i-1}^{3} m_i X_i = \frac{1}{73}(31 \cdot 5 + 35 \cdot 4 + 7 \cdot 3) = \frac{1}{73}(155 + 140 + 21) = \frac{316}{73} = 4{,}32 \approx 4{,}3$$

$$\bar{Y} = \frac{1}{n}\sum_{j-1}^{3} n_j Y_j = \frac{1}{77}(12 \cdot 5 + 45 \cdot 4 + 20 \cdot 3) = \frac{1}{77}(60 + 180 + 60) = \frac{300}{77} = 3{,}896 \approx 3{,}9$$

Thus, the average performance in the experimental group is greater than that in the control group: $\bar{X} > \bar{Y}$.

Based on the above results, we will calculate the quality indicators of the experimental trials.

It is known to us that: $\bar{X}$=4,3, $\bar{Y} = 3{,}9, \delta_m = 0{,}14, \delta_n = 0{,}16$.

From this, the quality indicators:

$$K_{usb} = \frac{(\bar{X} - \delta_m)}{(\bar{Y} - \delta_n)} = \frac{4{,}3 - 0{,}14}{3{,}9 + 0{,}16} = \frac{4{,}16}{4{,}06} = 1{,}02 > 1;$$

$$K_{bdb} = (\bar{X} - \delta_m) - (\bar{Y} - \delta_n) = (4{,}3 - 0.14) - (3{,}9 - 0.16) = 4{,}16 - 3{,}74 = 0{,}42 > 0.$$

From the obtained results, it can be seen that the criterion for evaluating the effectiveness of teaching is greater than one (K_{usb}=*1,02>1*) and the criterion for assessing the level of knowledge is greater than zero (K_{bdb}=*0,42>0*). The indicators of the experimental groups are higher than those of the control group.

We will calculate these performance indicators in percentages:

$$\frac{\bar{X}}{3}\cdot 100\% - \frac{\bar{Y}}{3}\cdot 100\% = \frac{4{,}3}{3}\cdot 100 - \frac{3{,}9}{3}\cdot 100 = \frac{40}{3} = 13{,}3\%$$

During the research, the performance indicators obtained as part of the experimental trials were also analyzed, and it was determined that the indicator of the selected experimental group at Jizzakh branch of the National University of Uzbekistan named after Mirzo Ulug'bek, Navoiy State University, and Samarkand State Institute of Foreign Languages increased by 13.3% compared to the control group.

Thus, the statistical analyses mentioned above provide a basis for acknowledging that the hypothesis regarding the effectiveness and results of the system for improving the higher-order cognitive competences of future English language specialists based on the PhenoBL educational approach has been confirmed by the results of the experimental trials.

CONCLUSION

The results of the comprehensive theoretical analysis, pedagogical experimental studies, and their mathematical–statistical analysis conducted within the framework of the topic 'Improving Higher-Order Cognitive Competences of Future English Language Specialists Through the Phenomenon-Based Learning Approach' confirmed the validity of the proposed scientific hypotheses and made it possible to draw the following general conclusions:

1. The research highlighted the relevance and significance of enhancing future English language specialists' higher-order cognitive competences through the PhenoBL approach by developing their analytical, evaluative, creative, metacognitive, critical thinking, decision-making, problem-solving, and independent learning skills within the higher education context.
2. The developed Uzbek PhenoBL model, grounded in a careful analysis of curricula, module syllabi, and qualification requirements for English teacher education programs, ensures rational use of existing educational resources and facilitates student learning according to the Qualification Requirements.
3. Methodological foundations for integrating the Uzbek PhenoBL model into English teacher education programs have been developed, taking into account the model's pedagogical and reporting functions, as well as the modules' content, assessment specifications, and learning outcomes.
4. The results after the experimental trials were 4.3 in the experimental groups, while in the control groups, it was 3.9. This indicates that the growth in the experimental groups was 13.3% than the control groups' results regarding the HOCC development through the PhenoBL approach.
5. The effectiveness of the analytical, evaluative, creative, and metacognitive components of the three-phase EED (Engage, Explore and Discover) technique, developed through the integration of the theoretical concepts of constructivism, social constructivism, emergent learning, and situated cognition, and aimed at the step-by-step development of higher-order cognitive competences of future English language specialists, has been scientifically substantiated.

6. The integration of the didactic mechanism of the ‘Uzbek PhenoBL’ educational model, which is based on project-based learning, problem-based learning, research-oriented learning, interdisciplinary learning, metacognitive, collaborative and team-based, digital and blended learning, as well as formative and summative assessment methods, has been practically proven to be an effective means of didactic development of the learning process through enhancing students’ analytical thinking, critical analysis, interdisciplinary inquiry, collaborative work, and self-assessment skills.

7. It has been scientifically substantiated that the ‘Uzbek PhenoBL’ model, developed based on the principles of the PhenoBL educational approach and the objectives of the Cambridge International AS and A Level Thinking Skills programme, promotes the development of an interdisciplinary component that enhances students’ independent research abilities and supports the concepts of student-centered learning, practice-based education, and lifelong learning.

8. “It has been empirically proven that the e-HOCC journal, part of the PhenoBL electronic platform developed based on the EED (Engage, Explore and Discover) technique and monitoring students’ independent learning, supports the development of students’ transversal-cognitive, metacognitive, social, communicative, and digital competences, thereby defining their cognitive development trajectories in accordance with the University 4.0 model.

9. Methodological recommendations have been formulated not only for future English specialists but also for other stakeholders, educational administrators, curriculum designers, and employers. These recommendations enable administrators to identify learning challenges, plan instruction effectively, ensure graduates acquire the necessary skills and competences for the University 4.0 model, and provide transparency in assessment, making students active participants in their learning process.

Suggestions and Recommendations

Based on theoretical, methodological, and experimental studies, the following recommendations are proposed for the successful integration of the PhenoBL approach to improve future English language specialists’ higher-order cognitive competences:

1. Introduce the Uzbek PhenoBL model at the very beginning of students’ studies, ideally within the “Integrated Language Skills” module in the first and second semester of the second academic year.

2. Align model tasks and activities with module content, formative and summative assessments, and independent studies of the “Integrated Language Skills” module to ensure effective model usage.

3. Integrate interdisciplinary learning as a key to developing higher-order cognitive competences to engage students to think more critically when analyzing real-world phenomena from multiple disciplines.

4. It is recommended to integrate the EED (Engage–Explore–Discover) pedagogical technology into higher education curricula to enhance students’ higher-order cognitive competences through phenomenon-based engagement, inquiry-driven exploration, knowledge synthesis, and formative performance-based assessment.

НАУЧНЫЙ СОВЕТ PhD.03/2025.27.12.Ped.37.01 ПО ПРИСУЖДЕНИЮ УЧЁНЫХ СТЕПЕНЕЙ ПРИ САМАРКАНДСКОМ ГОСУДАРСТВЕННОМ ИНСТИТУТЕ ИНОСТРАННЫХ ЯЗЫКОВ

САМАРКАНДСКИЙ ГОСУДАРСТВЕННЫЙ ИНСТИТУТ ИНОСТРАННЫХ ЯЗЫКОВ

ДУШАНОВА НАРГИЗА МАМАТКУЛОВНА

СОВЕРШЕНСТВОВАНИЕ ВЫСОКОУРОВНЕВЫХ КОГНИТИВНЫХ КОМПЕТЕНЦИЙ БУДУЩИХ СПЕЦИАЛИСТОВ ПО АНГЛИЙСКОМУ ЯЗЫКУ НА ОСНОВЕ ОБРАЗОВАТЕЛЬНОГО ПОДХОДА “PHENOBL”

13.00.02 – Теория и методика обучения и воспитания (английский язык)

АВТОРЕФЕРАТ
диссертации доктора философии (PhD) по педагогическим наукам

Самарканд – 2026

Тема диссертации доктора философии (PhD) по педагогическим наукам зарегистрирована в Высшей аттестационной комиссии при Министерстве высшего образования, науки и инноваций Республики Узбекистан за номером B2025.1.PhD/Ped8171.

Диссертация выполнена в Самаркандском государственном институте иностранных языков.

Автореферат диссертации размещен на трёх языках (узбекский, английский, русский, (резюме)) на веб-сайте www.samdchti.uz и по адресу www.ziyonet.uz Информационно-образовательного портала «ZiyoNet».

Научный руководитель:	**Тухтасинов Илхомжон Мадаминович** доктор педагогических наук (DSc), профессор
Официальные оппоненты:	**Сабирова Гулгоза Садиковна** доктор педагогических наук (DSc), профессор
	Норматова Нуржамол Норматовна доктор философии (PhD) по филологическим наукам, доцент
Ведущая организация:	**Каршинский государственный университет**

Защита диссертации состоится «____» _____2026 года в ____ часов на заседании Научного совета PhD.03/2025.27.12.Ped.37.01 при Самаркандском государственном институте иностранных языков по адресу: 1140117, Узбекистан, Самарканд, улица Гагарина, дом 43. Тел: (99866) 238-29-37, Факс: (+99866) 210-00-18; e–mail; info@samdchti.uz.

С диссертацией можно ознакомиться в Информационно-ресурсном центре Самаркандского государственного института иностранных языков (зарегистрирована под № _____). (Адрес: 140104, Узбекистан, Самарканд, улица Гагарина, дом 43 Тел: (99866) 238-29-37)

Автореферат диссертации разослан «____» _____ 2026 года.
(Реестр протокола рассылки № ____ от «_____» _____2026 года).

У.У. Жуманазаров
Председатель Научного совета по присуждению учёных степеней, доктор педагогических наук (DSc), профессор

А.Э. Рустамова
Ученый секретарь Научного совета по присуждению учёных степеней, доктор педагогических наук (DSc), доцент

А.Я. Нурмуратов
Председатель Научного семинара при Научном совете по присуждению учёных степеней, доктор философии (PhD) по филологическим наукам, доцент

ВВЕДЕНИЕ (Аннотация диссертации доктора философии (PhD))

Цель исследования улутшать у будущих студентов, изучающих английский язык, навыков высшего уровня когнитивных компетенций посредством внедрения феномено-ориентированного подхода в практику высшего образования.

Объектом данного исследования выступает процесс формирования когнитивных компетенций высшего порядка у студентов второго курса, изучающих английский язык, посредством применения феномено-ориентированного обучения в условиях высшей школы.

Предметом исследования выступают содержание и организационные формы внедрения феномено-ориентированного обучения, направленного на развитие у будущих преподавателей английского языка аналитических, оценочных и креативных навыков мышления.

Научная новизна исследования заключается в следующем:

эффективность трёхфазной техники EED (Engage, Explore, and Discover), разработанной для поэтапного развития высокоуровневых когнитивных компетенций будущих специалистов по английскому языку и основанной на интеграции теоретических концепций конструктивизма, социального конструктивизма, возникающего обучения и ситуативного познания, включая её аналитические, оценочные, креативные и метакогнитивные компоненты, была научно обоснована;

практически продемонстрировано, что интеграция дидактического механизма образовательной модели “Uzbek PhenoBL”, основанной на проектном обучении, проблемно-ориентированном обучении, исследовательском подходе, междисциплинарном обучении, метакогнитивных подходах, совместной и командной работе, цифровом и смешанном обучении, а также методах формирующего и итогового оценивания, служит эффективным инструментом для дидактического развития учебного процесса, повышая у студентов аналитическое мышление, критический анализ, междисциплинарные исследования, навыки сотрудничества и умение самооценки;

эмпирически доказано, что журнал e-HOCC, включённый в электронную платформу PhenoBL, разработанную на основе техники EED (Engage, Explore and Discover) для мониторинга самостоятельного обучения студентов, способствует развитию трансверсальных когнитивных, метакогнитивных, социальных, коммуникативных и цифровых компетенций, требуемых моделью University 4.0, а также определяет траектории когнитивного развития студентов;

научно доказано, что междисциплинарный компонент модели “Uzbek PhenoBL”, разработанный на основе принципов образовательного подхода PhenoBL и целей программы Cambridge AS and A Level Thinking Skills, развивает концепции ориентированного на студента обучения, практико-ориентированного образования и непрерывного обучения, повышая способности студентов к самостоятельным исследованиям.

Реализация результатов исследования. На основе теоретических и практических предложений, направленных на развитие когнитивных компетенций высшего порядка посредством феномено-ориентированного подхода (PhenoBL), были реализованы следующие направления работы:

научные выводы об эффективности трёхфазной техники EED (Engage, Explore and Discover), разработанной для поэтапного развития высокоуровневых когнитивных компетенций будущих специалистов по английскому языку и основанной на интеграции теоретических концепций конструктивизма, социального конструктивизма, возникающего обучения и ситуативного познания, включая её аналитические, оценочные, креативные и метакогнитивные компоненты, были внедрены в образовательный процесс Кафедры иностранных филологий, Факультета иностранных языков, Карагандинского университета имени академика Е.А. Букетова. С 29 апреля 2025 года данная техника систематически применяется при преподавании курса “English for IELTS”. В результате были разработаны и внедрены в образовательный процесс учебные материалы для IELTS, интегрирующие подход PhenoBL и направленные на последовательное и систематическое развитие высокоуровневых когнитивных компетенций;

научные выводы, подтверждающие, что интеграция дидактического механизма образовательной модели “Uzbek PhenoBL”, основанной на проектном обучении, проблемно-ориентированном обучении, исследовательском подходе, междисциплинарном обучении, метакогнитивных подходах, совместной и командной работе, цифровом и смешанном обучении, а также методах формирующего и итогового оценивания, является эффективным инструментом для дидактического развития учебного процесса, повышая у студентов аналитическое мышление, критический анализ, междисциплинарные исследования, навыки сотрудничества и умение самооценки, были использованы в рамках проекта “English Access Microscholarship Program” (Справка № 2829-02, от 20 декабря 2024 года, Самаркандский государственный институт иностранных языков). В результате улучшились аналитическое мышление, критический анализ, междисциплинарные исследования, работа в команде и навыки самооценки студентов, что практически подтвердило повышение эффективности учебного процесса;

научные выводы, демонстрирующие, что журнал e-HOCC, включённый в электронную платформу PhenoBL, разработанную на основе техники EED (Engage, Explore and Discover) для мониторинга самостоятельного обучения студентов, способствует развитию трансверсальных когнитивных, метакогнитивных, социальных, коммуникативных и цифровых компетенций, требуемых моделью University 4.0, а также определяет траектории когнитивного развития студентов, были применены в проекте “Teaching English for Specific Purposes in Uzbekistan”, запланированном Посольством США в Ташкенте в 2024 году (Справка № 661-02, от 7 марта 2025 года, Самаркандский государственный институт иностранных языков). В результате была создана эффективная система мониторинга траекторий когнитивного

развития студентов, а также в соответствии с требованиями модели University 4.0 были развиты трансверсальные когнитивные, метакогнитивные, социальные, коммуникативные и цифровые компетенции, что практически подтвердило повышение эффективности самостоятельного обучения;

научные выводы, полученные по модели “Uzbek PhenoBL”, разработанной на основе принципов образовательного подхода PhenoBL и целей программы Cambridge AS and A Level Thinking Skills, особенно её междисциплинарного компонента, направленного на развитие у студентов способностей к самостоятельным исследованиям и поддержку концепций ориентированного на студента обучения, практико-ориентированного образования и непрерывного обучения, были использованы при подготовке сценария телевизионной программы “Assalom, Samarqand!”, которая была эфирно показана 25 июня 2024 года (Справка № 01-07/-101, от 6 марта 2025 года, Самаркандский государственный институт иностранных языков). В результате содержание телепрограммы подчеркнуло идеи ориентированного на студента, практико-ориентированного и непрерывного обучения, а также эффективно донесло до широкой аудитории важность развития у студентов навыков самостоятельных исследований, критического и аналитического мышления.

Объём и структура диссертации. Диссертация состоит из введения, трёх глав, заключения, списка использованной литературы и приложений. Общий объём диссертации составляет 159 страницу.

E’LON QILINGAN ISHLAR RO‘YXATI
LIST OF PUBLISHED WORKS
СПИСОК ОПУБЛИКОВАННЫХ РАБОТ

I bo‘lim (I часть; part I)

1. Dushanova N.M. Theoretical foundation of phenomenon-based learning approach to teaching//ISSN: 2835-3579Special Issue on "Best Research Methods of Science, Education and Modernity"www.bjisrd.com Vol. 2, №11 (2023): Best journal of innovation in science, research and development. 2023 йил 27 Noyabr, – Toshkent, 2023. – B. 82-88. (13.00.00. № 2)
2. Dushanova N.M. Previous studies on the implementation of PhenoBL in education. Best journal of innovation in science, research and development ISSN: 2835-3579 Volume:02 Issue:12|2023.-B. 788-796. (13.00.00. № 12)
3. Dushanova N.M. The comparative analyses of learning approaches//So‘z san’ati xalqaro jurnali 6 son 6 jild Doi Journal 10.26739/2181-9297 Toshkent-2023.-B. 167-171. (13.00.00. № 6)
4. Dushanova N.M., Tursunova Sh.Sh. The significance of critical thinking in Education// Namangan Davlat Universiteti Ilmiy axborotnomasi, Namangan-2023-yil 2-son, B.- 470-475. (13.00.00. № 2)
5. Dushanova N.M. Methodological recommendations for the formation and Development of higher-order cognitive competences of language learners//So‘z san’ati xalqaro jurnali 7 jild, 4 son Doi Journal 10.26739/2181-9297 Toshkent- 2024. B.122-130. (13.00.00. № 4)
6. Dushanova N.M. Traditional-based learning versus Phenomenon-based learning//index reference of the international scientific and practical conference “Humanistic role of language and literature in the contemporary globalization” 19-20.04.2024.-B. 36-42.
7. Dushanova N.M. Local and international research carried out on the implementation of phenomenon-based learning and higher-order cognitive development//academic research in modern science. International scientific online conference https://doi.org/10.5281/zenodo.14202046 22.11.2024.-B.111-115.
8. Dushanova N.M. Cultivating Higher-Order Cognitive Skills through Phenomenon-based Learning Approach: Strategies for Deeper Learning (SDL)//Ta’limning zamonaviy transformatsiyasi 8-to‘plam 3-son iyun 2024. – B. 236-242.
9. Dushanova N.M. Sobirova G. Q. The scope of the research carried out on the PhenoBL approach and cognitive skills//Ta’limning zamonaviy transformatsiyasi Onlain respublika ilmiy amaliy konferensiya 19.01.2025.-B.3-7.

II bo‘lim (II часть; part II)

10. Dushanova N.M. The development of higher-order cognitive competences through the phenomenon-based learning approach//So‘z san’ati xalqaro jurnali 7 son 2 jild Doi Journal 10.26739/2181-9297 Toshkent- 2024.-B.135-143.

11. Dushanova N.M. Methodological recommendations for the development and enhancement of higher-order cognitive competences //Til va adabiyot.uz /OAK ilmiy-metodik elektron jurnal 2024-yil, dekabr 22-son**.** B. 270-273.

12. Dushanova N.M. The Importance of Developing Higher-Order Cognitive Competences via the Implementation of the Phenomenon-Based Learning Approach//Vol. 3 No. 1 (2025): Excellencia: International Multi-disciplinary Journal of Education Volume3, Issue 1, 2025 ISSN (E): 2994-9521 01.10.2025/Impaktfactor. B.-113-118.

13. Dushanova N.M. Tajriba-sinov ishlarining tahlili va ularning samaradorlik darajasi//“Chet tillarni o’qitishda dolzarb muammolar, innovatsiyalar, an’analar, yechimlar va badiiy adabiyotlar tahlili “Respublika ilmiy-amaliy Anjuman, Samarqand-2025.4.25, B.-660-668.

14. Dushanova N.M. Analysis of qualification requirements, curricula, and textbooks for 2nd-course students at higher education// "Yangi O‘zbekistonda tabiiy va ijtimoiy-gumanitar fanlar" respublika ilmiy-amaliy konferensiyasi, Samarqand-2025.6.6., Pp.-51-56.

15. Dushanova N.M. What matters most: Low-order or Higher-order cognitive skills? “Tilni o‘qitish, o‘rganish va baholashdagi innovatsiyalar” xalqaro ilmiy konferensiya, Samarqand-2025.9.10., Pp.-245-249.

Avtoreferat Samarqand davlat chet tillar instituti “Xorijiy filologiya” jurnali tahririyatida tahrirdan o‘tkazilib, o‘zbek, rus va ingliz tillaridagi matnlari o‘zaro muvofiqlashtirildi (23.04.2026-yil).

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