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- 13.00.00 Pedagogika fanlari
- 13.00.01 Pedagogika nazariyasi. Pedagogik ta'limotlar tarixi
- 13.00.02 Ta'lim va tarbiya nazariyasi va metodikasi (sohalar bo'yicha)
- 13.00.03 Maxsus pedagogika
- 13.00.04 Jismoniy tarbiya va sport mashg'ulotlari nazariyasi va metodikasi
- 13.00.05 Kasb-hunar ta'limi nazariyasi va metodikasi
- 13.00.06 Elektron ta'lim nazariyasi va metodikasi (ta'lim sohaları va bosqichlari bo'yicha)
- 13.00.07 Ta'limda menejment
- 13.00.08 Maktabgacha ta'lim va tarbiya nazariyasi va metodikasi
- 13.00.09 Ijtimoiy pedagogika
- 07.00.00 Tarix fanlari
- 19.00.00 Psixologiya fanlari
- 01.00.00 Fizika-matematika fanlari
- 02.00.00 Kimyo fanlari
- 03.00.00 Biologiya fanlari
- 09.00.00 Falsafa fanlari
- 10.00.00 Filologiya fanlari
- 11.00.00 Geografiya fanlari

# M

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Pedagogika, psixologiya fanlariga ixtisoslashgan ilmiy jurnal



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# MUNDARIJA

Pedagog kadrlar tayyorlashda microteaching metodining tashkiliy asoslari va uni samarali qo'llash mexanizmlari.....	10
<a href="#">Abdiqayumova Malika</a>	
Ijtimoiy pedagogik faoliyatning bolalarning moslashuv ko'nikmalarini shakllantirishdagi o'rni .....	14
<a href="#">Abdullayeva Yulduz Qurbon qizi, Xudayberdiyeva Zilola Azamat qizi</a>	
Talabalarning og'zaki nutqini interfaol usullar yordamida rivojlantirish .....	18
<a href="#">Atamirzayeva Ezoza</a>	
English Language Barriers Among Rural Ecotourism Guides in Uzbekistan .....	22
<a href="#">Aminova Asilaxon Sobir qizi</a>	
Совершенствование методов обучения студентов эффективному управлению временем на основе тайм-менеджмента.....	25
<a href="#">Уразова М. Б., Абатова У. Б.</a>	
Zamonaviy ta'limda innovatsion pedagogik texnologiyalarning o'rni va samaradorligi .....	30
<a href="#">Xurramova Dilso'z Baxtiyor qizi</a>	
Maktabgacha ta'lim tashkilotlarida o'yin asosida ta'limni tashkil etishning pedagogik ahamiyati.....	33
<a href="#">Gaipova Akjunis Qayratovna</a>	
Bo'lajak o'qituvchilarda o'zini o'zi tashkil etish tushunchasi va uning pedagogik mohiyati.....	37
<a href="#">Alimov Bekzod Nematovich</a>	
O'qituvchilarning uzluksiz kasbiy rivojlanish tadbirlarini maktab darajasida boshqarishning integratsiyalashgan yondashuvi .....	41
<a href="#">Ahadova Mushtariybonu Akmal qizi</a>	
Talabalarning tanqidiy fikrlash ko'nikmalarini shakllantirishda innovatsion yondashuvlar .....	48
<a href="#">Xurramova Sanobar Mahmatmurod qizi</a>	
Pedagogical Integration as a Factor of Humanization in Professional Teacher Education .....	53
<a href="#">Yusupova Mukhabbat Anatolyevna</a>	
Yoshlarda iqtisodiy tafakkur shakllanishida etnik muhitning ta'siri.....	58
<a href="#">Erkinova Sevara Najmiddin qiz</a>	
Innovative Approaches to Teaching English in Higher Education: a Methodological Study .....	61
<a href="#">Gulsara Khakimova</a>	
Bo'lajak pedagoglarda kognitiv faollikni rivojlantirishda neyropedagogika asoslari.....	63
<a href="#">Hikmatova Jamila Fatox qizi</a>	
Maktabgacha yoshdagi aqli zaif bolalarning eshituv idrokini rivojlantirish texnologiyalari.....	68
<a href="#">I. S. Xamrayeva, Nuriddinova Muxayyo Ishxodjayevna</a>	
Badiiy matn asosida nutqiy ko'nikmalar va ijodiy tafakkur integratsiyasini ta'minlash metodikasi .....	73
<a href="#">Jo'rayeva Sevinch Abdialim qizi</a>	
Etnopedagogik muhitda maktabgacha katta yoshdagi bolalarning nutqini rivojlantirish.....	77
<a href="#">Murodova Farangis G'anisherovna</a>	
Malaka oshirish jarayonida muammoga asoslangan o'qitish vositasida MTT tarbiyachilarining 4K ko'nikmasini rivojlantirish texnologiyasi .....	81
<a href="#">Ravshanova Xafiza Komilovna</a>	
Maktabgacha ta'lim tashkilotlarida xalq og'zaki ijodi vositalaridan (ertak, maqol, qo'shiq, afsona, doston va boshqalar) foydalanishning nazariy asoslari, xalqaro va milliy tajribasi .....	85
<a href="#">Tog'ayeva Munisa Muxammadiyevna</a>	
Akademik ko'nikmalarni rivojlantirish asosida kelajakdagi o'qituvchining kasbiy kompetensiyasini shakllantirish .....	89
<a href="#">Tursunova Elmira Ulug'bekovna, Rayimova Mushtariy Raup qizi</a>	
Sensor integratsiya autizm spektori buzilishi bo'lgan bolalarning xulq-atvor va hissiy holatiga ta'siri.....	91
<a href="#">Xamidova Muyassar Polsaidovna, Abdullayeva Muslima Shovkat qizi</a>	



Bo'lajak boshlang'ich ta'lim o'qituvchilarining mantiqiy fikrlashini rivojlantirishning pedagogik shart-sharoitlari .....	96
<a href="#">Xoshimova Dilobar Kuchkarovna, Nortosheva Dildora Orif qizi, Avazmurodova Mehribon Sharif qizi</a>	
Инновационная методика нравственного воспитания в начальных классах: подход межпредметной интеграции .....	101
<a href="#">Улугмурадова Шохсанам</a>	



# PEDAGOGICAL INTEGRATION AS A FACTOR OF HUMANIZATION IN PROFESSIONAL TEACHER EDUCATION

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**Abstract:** Contemporary professional education systems are structured around disciplinary specialization; this design often undermines the humanistic aim of forming reflective, morally responsible, and holistic личности. The study presents a systematic theoretical and functional analysis of pedagogical integration as a mechanism for the humanization of professional teacher education. A critical review of the literature and a comparative functional analysis were conducted, drawing on the foundational works of Bezrukova (1990), Berulava (1993), Danilyuk (2000), and Dzhegutanova (2010-), as well as the integration taxonomies of Harden (2000-) and Fogarty (1991-). Three invariant functions of pedagogical integration were identified and hierarchically structured: the methodological function (including worldview-axiological, heuristic, and instrumental aspects), the developmental function, and the technological function. The worldview-axiological aspect is determined as the leading humanizing force. Integration humanizes education by shifting the learner from the position of a human-functioner to that of a human-creator. Institutional, epistemological, and assessment-related challenges are also examined. Integration is substantiated not as an auxiliary curricular component, but as a fundamental philosophical orientation of humanistic professional teacher education.

**Key words:** pedagogical integration, humanization of education, professional teacher education, integrative worldview, methodological function, developmental function, technological function, reflective practice.

**Annotatsiya:** Zamonaviy professional ta'lim tizimlari fanlar ixtisoslashuvi asosida tashkil etilgan bo'lib, bunday yondashuv ko'pincha refleksiv fikrlaydigan, axloqiy jihatdan mas'uliyatli va yaxlit shaxsni shakllantirishga qaratilgan insonparvarlik maqsadlariga salbiy ta'sir ko'rsatadi. Tadqiqot pedagogik integratsiyani professional pedagogik ta'limni insonparvarlashtirish mexanizmi sifatida tizimli nazariy va funksional jihatdan tahlil qiladi. Ishda Bezrukova (1990-), Berulava (1993-), Danilyuk (2000-) va Dzhegutanova (2010-)ning fundamental ishlari, shuningdek Harden (2000-) hamda Fogarty (1991-) ning integratsiya taksonomiyalariga tayangan holda tanqidiy adabiyotlar tahlili va qiyosiy funksional tahlil usullaridan foydalanildi. Natijada pedagogik integratsiyaning uchta invariant funksiyasi aniqlanib, ierarxik tarzda tizimlashtirildi: metodologik funksiya (uning tarkibiga dunyoqarash-aksiologik, evristik va instrumental jihatlari kiradi), rivojlantiruvchi funksiya hamda texnologik funksiya. Dunyoqarash-aksiologik jihat insonparvarlashtiruvchi yetakchi omil sifatida belgilandi. Integratsiya ta'limni insonparvarlashtiradi, ya'ni ta'lim oluvchini inson-funksiya maqomidan inson-yaratuvchi maqomiga o'tkazadi. Shuningdek, institutsional, epistemologik va baholash bilan bog'liq muammolar ham ko'rib chiqiladi. Integratsiya o'quv dasturining qo'shimcha unsuri emas, balki insonparvar professional pedagogik ta'limning fundamental falsafiy yo'nalishi sifatida asoslab beriladi.

**Kalit so'zlar:** pedagogik integratsiya, ta'limni insonparvarlashtirish, professional pedagogik ta'lim, integrativ dunyoqarash, metodologik funksiya, rivojlantiruvchi funksiya, texnologik funksiya, refleksiv amaliyot.

**Аннотация:** Современные системы профессионального образования выстроены вокруг дисциплинарной специализации; такая модель нередко подрывает гуманистическую задачу формирования рефлексивной, нравственно ответственной и целостной личности. Исследование представляет системный теоретический и функциональный анализ педагогической интеграции как механизма гуманизации профессионального педагогического образования. Используются критический обзор научной литературы и сравнительный функциональный анализ с опорой на фундаментальные труды Безруковой (1990-), Берулавы (1993-), Данилюка (2000-) и Джегутановой (2010-), а также интеграционные таксономии Харден (2000-) и Фогарти (1991-). Выявлены и иерархически структурированы три инвариантные функции педагогической интеграции: методологическая функция (включающая мировоззренчески-аксиологический, эвристический и инструментальный аспекты), развивающая функция и технологическая функция. Установлено, что мировоззренчески-аксиологический аспект выступает ведущей гуманизирующей силой. Интеграция гуманизирует образование, переводя обучающегося из позиции человека-функции в позицию человека-творца. Рассмотрены институциональные, эпистемологические и оценочные трудности. Интеграция обоснована не как дополнительный элемент учебного плана, а как фундаментальная философская ориентация гуманистического профессионального педагогического образования.

**Ключевые слова:** педагогическая интеграция, гуманизация образования, профессиональное педагогическое образование, интегративное мировоззрение, методологическая функция, развивающая функция, технологическая функция, рефлексивная практика.

## INTRODUCTION

Professional teacher education occupies an inherently paradoxical position within the modern university. On the one hand, the institutional logic of higher education, organized around academic departments, discipline-specific assessment, and sequential rather than integrated curricula, consistently rewards specialization. On the other hand, the professional logic of teaching consistently demands integration: the capacity to draw simultaneously on knowledge of subject matter, learning psychology, cultural context, and pedagogical method in real-time response to the specific and often unpredictable needs of learners.

This paradox is not merely structural; it reflects a deeper philosophical tension within professional education between two conceptions of its purpose. The first conceives professional education as training: the transmission of defined competences to candidates who will execute them within established institutional roles. The second conceives professional education as formation: the cultivation of persons who will bring genuine intellectual and moral agency to a profession whose demands cannot be fully anticipated or proceduralized. The argument of this article is that pedagogical integration – the principled, systematic unification of knowledge, methods, and values across disciplinary boundaries – is the primary educational mechanism through which the second conception can be realized.

Despite extensive scholarship on integration in curriculum theory and educational philosophy, the specific mechanisms through which pedagogical integration serves the humanization of professional teacher education remain insufficiently theorized. The functions of integration have been catalogued by various scholars; however, their hierarchical relationships, their humanizing significance, and their implications for programme design have not been brought into a single, coherent theoretical account. This gap constitutes the research problem addressed in this article.

This study pursues three objectives:

- (1) to establish the conceptual foundations of pedagogical integration and its relationship to the humanization of professional education;
- (2) to develop a systematic functional analysis of the three invariant functions of pedagogical integration and their hierarchical interdependence; and
- (3) to identify the leading humanizing aspect of the methodological function and demonstrate its educational significance for the formation of future teachers.

The significance of this study lies in its contribution to the theoretical grounding of integrated approaches to professional teacher education. By demonstrating that integration is not merely a curriculum design strategy but a philosophical orientation toward the formation of whole persons, the article provides the conceptual foundation needed to guide programme development, faculty preparation, and assessment reform in teacher education institutions.



## REASERCH METGODOOLOGY

This study employs a qualitative theoretical research design, combining critical literature review, comparative conceptual analysis, and functional mapping. Theoretical research of this kind is appropriate when the aim is not to generate new empirical data but to develop, clarify, and systematize conceptual frameworks, thereby producing theoretically grounded analysis capable of informing empirical research and practical programme development.

The primary data sources for this study are the foundational theoretical texts on pedagogical integration: Bezrukova (1990-) on the essence, composition, and mechanisms of integration; Berulava (1993-) on the integration of educational content; Danilyuk (2000-) on the theory of educational integration; and Dzhegutanova (2010-) on integration as a factor of humanization in professional education. These works were selected because they constitute the established theoretical core of the field and provide the most systematic accounts of integration's functions and mechanisms.

Secondary sources providing comparative and contextual perspectives include Harden's (2000-) integration ladder – a taxonomy of eleven levels of curricular integration, ranging from isolation to transdisciplinarity – and Fogarty's (1991-) ten models of integrated curriculum. These sources were selected because they provide internationally recognized frameworks against which the functional analysis developed in this article can be positioned.

The analytical procedure consisted of four stages. First, a systematic reading of the primary sources was conducted to identify all references to the functions, mechanisms, and humanizing effects of pedagogical integration. Second, the identified functions were classified according to their scope (theoretical versus practical) and their primary locus of impact (curriculum design, individual learner formation, or institutional transformation). Third, the classified functions were mapped hierarchically to establish their interdependence and to identify which functions create the conditions for the realization of others. Fourth, the hierarchical map was evaluated against the criterion of humanizing educational significance: determining which aspect of which function most directly serves the formation of a whole, creative, and morally engaged professional.

The validity of the analysis rests on the systematic and transparent application of the analytical procedure described above, the triangulation of findings across multiple foundational sources, and the consistency of the resulting functional map with established integration taxonomies (Harden, 2000-; Fogarty, 1991-). The principal limitation is the theoretical rather than empirical character of the study: the functional analysis developed here has not been directly tested through empirical investigation of actual integrated programmes and their outcomes. Empirical validation represents the natural next step for this line of inquiry.

## ANALYSIS AND RESULTS

The functional analysis yielded three principal findings:

- (1) the identification of three invariant functions of pedagogical integration applicable across all varieties of the integrative approach;
- (2) the mapping of their hierarchical interdependence; and
- (3) the identification of the worldview-axiological aspect of the methodological function as the leading humanizing force within the integrative framework.

The methodological function operates at the level of educational design and theory. It establishes the philosophical and conceptual framework – the justification and direction for all integrative activity. Danilyuk (2000-) identified three aspects within this function: worldview-axiological (the formation of an integrative worldview in the learner), heuristic (the generation of new pedagogical theory through cross-disciplinary inquiry), and instrumental (the practical restructuring of educational systems and practices). Bezrukova (1990-) confirmed this tripartite structure, adding that the worldview-axiological aspect occupies the leading position because it is most directly concerned with the formation of the person.

The developmental function describes integration's impact on individual learner formation. It is accumulated by the worldview-axiological aspect of the methodological function and takes its character from that connection: it is concerned with the holistic formation of the professional across intellectual, moral, and social dimensions. The defining feature of the developmental function is its orientation toward what Danilyuk (2000-) called the human-creator – the professional who brings genuine intellectual and moral agency to their work, as distinct from the human-functioner, who executes pre-defined procedures within established institutional roles.

The technological function operates at the most concrete level: the design and delivery of integrated learning experiences. It is accumulated by the instrumental aspect of the methodological function and is concerned with

the practical engineering of programmes, courses, and assessment tasks that require simultaneous engagement with knowledge from multiple disciplines. Berulava (1993-) showed that the technological function is most effective when it operates in close coordination with the methodological function, ensuring that practical learning design is consistently guided by the theoretical understanding of what integration is for.

The three functions are not independent; they form a determinate hierarchy. The methodological function is primary: it establishes the conceptual and philosophical framework that gives the other two functions their purpose and direction. The developmental function is intermediate: it describes the impact on individual learners that the methodological function makes possible and that the technological function seeks to realize. The technological function is operational: it translates the theoretical commitments of the methodological function into the concrete learning experiences through which the developmental function is achieved.

This hierarchy has a critical implication: integration that operates only at the technological level – that designs cross-disciplinary activities without a clear theoretical orientation – risks degenerating into superficial thematic coordination. Fogarty's (1991-) typology of ten integration models provides empirical confirmation of this risk, documenting the tendency of lower-level integration approaches (such as "connected" or "sequenced" models) to produce the appearance of integration without the qualitative transformation it is designed to achieve.

Among the three aspects of the methodological function, the worldview-axiological aspect is identified as the leading humanizing force for the following reasons. The heuristic and instrumental aspects are primarily concerned with the development of theory and the transformation of institutional practice; respectively, both are educational goods, but they are goods of the system rather than goods of the person. The worldview-axiological aspect, by contrast, is directly concerned with the formation of the person: with the kind of thinker, the kind of professional, and, ultimately, the kind of human being that an integrated education produces.

Specifically, the worldview-axiological aspect humanizes education by repositioning the learner from a human-functioner to a human-creator. This repositioning is achieved through the cultivation of an integrative worldview: the capacity to perceive knowledge as a field of interconnections rather than a scatter of disciplines, to move between frameworks with intellectual ease, and to find in that movement a richer understanding of phenomena than any single framework can provide. When this capacity is realized, education ceases to be a process of competence accumulation and becomes a process of person formation – which is, by definition, the condition of humanization.

The identification of the worldview-axiological aspect as the leading humanizing force challenges the prevalent tendency in professional education reform to focus improvement efforts primarily at the technological level – redesigning courses, introducing new assessment formats, and updating content – without addressing the deeper methodological and philosophical orientations that determine whether integration is genuine or superficial.

This finding is consistent with Harden's (2000-) integration ladder, which places the highest levels of integration – fusion and transdisciplinary approaches – at the top of the ladder precisely because they require the most fundamental reorientation of the learner's relationship to knowledge. At these levels, integration is no longer a property of the curriculum but a property of the learner: it has been internalized as a mode of thinking and being rather than merely encountered as a feature of course design.

The findings of this study are consistent with, but extend, the existing theoretical literature on integration in professional education. Bezrukova (1990-) and Berulava (1993-) established the foundational functional taxonomy; Danilyuk (2000-) developed the theoretical account of integration's humanizing significance; and Dzhegutanova (2010-) demonstrated the applicability of this account to the specific conditions of professional teacher education. The contribution of the present study is the explicit hierarchical mapping of these functions and the identification of the worldview-axiological aspect as the leading humanizing force – a conclusion that is implicit in the existing literature but has not previously been stated with the systematic clarity that the present analysis provides.

For programme designers, the principal implication of the findings is that genuine integration requires investment at all three functional levels simultaneously. Technological-level interventions – integrated course modules, interdisciplinary assessment tasks, collaborative teaching arrangements – are necessary but not sufficient. They must be accompanied by methodological-level commitments: a clear theoretical orientation toward the formation of the whole person, a curriculum architecture that foregrounds the connections among disciplines, and an institutional culture that values integrative thinking as a genuine educational outcome rather than a rhetorical aspiration.

For teacher educators, the findings imply that the developmental function of integration can only be realized by faculty who are themselves intellectually integrated – who can model the integrative worldview they seek to cultivate in their students. This places a significant professional development responsibility on institutions of teacher education.



This study is limited by its theoretical character: the functional analysis developed here has not been directly tested through empirical investigation. Future research should address this limitation through longitudinal studies examining whether graduates of programmes designed around the hierarchical model identified here demonstrate greater professional resilience, more adaptive practice, and stronger ethical engagement than graduates of conventionally organized programmes. Additionally, the development of assessment instruments capable of capturing integrative worldview formation, as distinct from subject-specific competence, represents a priority for the field.

## CONCLUSIONS AND SUGGESTIONS

This article has developed a systematic theoretical and functional analysis of pedagogical integration as a mechanism for humanizing professional teacher education. Three conclusions follow from the analysis.

First, pedagogical integration operates through three invariant, hierarchically related functions – methodological, developmental, and technological – whose relationships determine whether integration is genuine or superficial. Programmes that invest only in the technological function produce integration in form rather than in substance.

Second, the worldview-axiological aspect of the methodological function is the leading humanizing force of pedagogical integration, because it is most directly concerned with the formation of the whole person – the human-creator – rather than the human-functioner, who is the ultimate goal of humanistic professional education.

Third, realizing the full humanizing potential of pedagogical integration requires simultaneous investment at all three functional levels: philosophical orientation (methodological function), holistic person formation (developmental function), and concrete integrated learning design (technological function). Any approach that neglects one level in favor of another will fail to achieve what integration, properly understood, promises.

### References:

1. Bezrukova, V. S. (1990-). Pedagogical integration: Essence, composition, and mechanisms of realization. In *Integration processes in pedagogical theory and practice* (pp. 5–25). Sverdlov Engineering-Pedagogical Institute.
2. Berulava, M. N. (1993-). *Integration of educational content*. Moscow: Pedagogika. p. 172.
3. Danilyuk, A. Ya. (2000-). *Theory of educational integration*. Rostov-on-Don. p. 440.
4. Dzhegutanova, N. I. (2010-). Pedagogical integration as a factor of humanization of professional education. *Scientific Bulletin*, (2), pp. 31–37.
5. Fogarty, R. (1991-). *The mindful school: How to integrate the curricula*. Palatine, IL: Skylight Publishing.
6. Gavriilyuk, V. V. (1984-). Foundations of the theoretical synthesis of modern didactic systems. In *Methodological problems of the development of Soviet pedagogy* (pp. 137–139). Moscow: APN USSR.
7. Harden, R. M. (2000-). The integration ladder: A tool for curriculum planning and evaluation. *Medical Education*, 34(7), pp. 551–557.
8. Maksimova, V. N. (1988-). *Interdisciplinary connections in the learning process*. Moscow: Prosveshchenie. p. 191.
9. Shchennikova, S. V. (2003-). *Integrative approach in preparing future teachers for creative activity* [Doctoral dissertation]. Kirov.
10. Belyaeva, A. P. (1991-). *Didactic principles of professional training in vocational schools*. Moscow: Vysshaya shkola. p. 208.
11. Freeman, D., & Johnson, K. E. (1998-). Reconceptualizing the knowledge-base of language teacher education. *TESOL Quarterly*, 32(3), 397–417.
12. Shulman, L. S. (1987-). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), pp. 1–22.

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- 13.00.00 Pedagogika fanlari
  - 13.00.01 Pedagogika nazariyasi. Pedagogik ta'limotlar tarixi
  - 13.00.02 Ta'lim va tarbiya nazariyasi va metodikasi (sohalar bo'yicha)
  - 13.00.03 Maxsus pedagogika
  - 13.00.04 Jismoniy tarbiya va sport mashg'ulotlari nazariyasi va metodikasi
  - 13.00.05 Kasb-hunar ta'limi nazariyasi va metodikasi
  - 13.00.06 Elektron ta'lim nazariyasi va metodikasi (ta'lim sohaları va bosqichlari bo'yicha)
  - 13.00.07 Ta'limda menejment
  - 13.00.08 Maktabgacha ta'lim va tarbiya nazariyasi va metodikasi
  - 13.00.09 Ijtimoiy pedagogika
  - 07.00.00 Tarix fanlari
  - 19.00.00 Psixologiya fanlari
  - 01.00.00 Fizika-matematika fanlari
  - 02.00.00 Kimyo fanlari
  - 03.00.00 Biologiya fanlari
  - 09.00.00 Falsafa fanlari
  - 10.00.00 Filologiya fanlari
  - 11.00.00 Geografiya fanlari



# MAKTABGACHA VA MAKTAB TA'LIMI

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