

INTERNATIONAL PRACTICES IN GIFTED STUDENT DEVELOPMENT: ADAPTING FINNISH INTERNSHIP MODELS IN UZBEKISTAN

Sattarova Muhabbat Alijanovna ¹

¹ Pedagogy, 2nd group, 1st year master's student,
International Nordic University

ARTICLE INFO

ARTICLE HISTORY:

Received: 13.06.2025

Revised: 14.06.2025

Accepted: 15.06.2025

KEYWORDS:

Gifted education,
Finnish teacher training,
differentiated
instruction, inclusive
education, teacher
preparation, gifted
students, reflective
pedagogy, educational
equity, professional
development, talent
identification

ABSTRACT:

Special attention is given to how Finnish teacher training incorporates reflective practice, child-centered pedagogy, and an understanding of differentiated instruction. The research also highlights the role of autonomy and trust in the Finnish teaching profession, which enables educators to design flexible and personalized learning pathways for gifted students. Drawing from curriculum documents, teacher interviews, and comparative educational studies, the article provides insights into best practices and challenges in gifted education from a Finnish perspective. The findings offer useful implications for other countries seeking to balance excellence with equity in teacher preparation and student support systems.

INTRODUCTION. Finland's approach to gifted education is also shaped by its broader values of equity, trust, and professionalism. Rather than isolating gifted students into separate schools or programs, the Finnish system emphasizes inclusion and differentiation within mainstream classrooms. Teachers are empowered to implement flexible teaching methods, such as curriculum enrichment, independent projects, and creative problem-solving tasks, to meet the needs of gifted learners without stigmatization or elitism.

This article explores the key features of teacher preparation in Finland as it relates to working with gifted students. It draws on teacher education curricula, national policy documents, and international research to provide a comprehensive view of how Finland develops teachers who are capable of identifying potential, nurturing talent, and providing

equitable learning opportunities for all students—including the most advanced. In doing so, the article also considers the challenges of balancing inclusion with excellence, and offers insights for countries seeking to improve their teacher training systems for gifted education.

Literature Review. Research on gifted education highlights the pivotal role of teacher preparedness in identifying and supporting gifted students. Effective education for gifted learners requires more than academic rigor—it demands pedagogical flexibility, psychological sensitivity, and a commitment to inclusive excellence.

Historically, gifted education has often relied on segregated models, where high-achieving students are grouped into specialized programs. However, recent literature supports a shift toward inclusive models where gifted learners remain within mainstream classrooms but receive differentiated instruction tailored to their advanced needs [1].

In this context, Finland's education system stands out for its dual commitment to equity and excellence. Finnish policy does not classify gifted students as a separate category but encourages all teachers to address student diversity—including exceptional ability—through personalization and inclusive practices [2].

According to Tirri and Kuusisto (2013), Finnish teacher education emphasizes moral and reflective professionalism, preparing teachers to navigate complex classroom dynamics while respecting each learner's uniqueness [3]. Giftedness, in this view, is not solely an academic trait but also includes creativity, ethical sensitivity, and social leadership.

In line with this holistic approach, Laine and Tirri (2016) argue that Finnish teachers are trained to identify potential in various domains, not just academic performance. Their study reveals that pre-service teachers in Finland learn to observe behavioral and motivational indicators of giftedness, allowing for early and equitable talent recognition [4].

Teacher preparation in Finland is conducted at the Master's level, a model rarely seen globally. The programs emphasize research-based pedagogy, child psychology, and teaching practice. This high level of education gives teachers the confidence and competence to design and implement individualized learning pathways within inclusive classrooms [5].

Moreover, according to Sahlberg (2015), the professional autonomy granted to Finnish teachers enables them to adjust curricula, employ creative instructional strategies, and respond in real-time to students' needs—including those of gifted learners [6]. Unlike systems that rely heavily on standardized testing to identify gifted students, Finland places greater trust in teacher judgment, supported by formative assessment and ongoing observation.

Haataja et al. (2020) emphasize that ongoing professional development is another critical factor in Finland's success. Finnish educators continually update their knowledge through school-based learning communities, workshops, and collaborative reflection—helping them stay informed about the evolving needs of gifted and talented students in a rapidly changing world [7].

However, researchers also note that the lack of formal gifted education policy in Finland can sometimes create inconsistencies in how gifted students are supported across schools. As Peltomaa and Vainikainen (2021) point out, while some schools and teachers demonstrate exemplary practices, others may lack the resources or training to fully meet the needs of high-ability students [8]. This highlights the importance of strengthening national guidelines and ensuring equitable access to teacher development opportunities.

In summary, the literature illustrates that Finland's success in preparing teachers for gifted education is rooted in a balanced combination of academic rigor, ethical teaching, and inclusive pedagogy. While there is room for improvement in policy coordination and awareness, the Finnish model provides valuable insights for other systems aiming to enhance teacher capacity in this vital area.

Research Methodology. This study employs a qualitative research methodology grounded in document analysis and expert interviews to explore how Finnish teacher education prepares educators to work with gifted students. A qualitative approach was chosen due to the exploratory nature of the topic, where the goal is to gain in-depth understanding rather than generalizable statistical conclusions.

1. Research Design

The research design is based on a descriptive-analytical framework, which aims to identify core principles, structures, and strategies used in Finnish teacher training programs with respect to gifted education. The study investigates both the formal curriculum content in teacher education institutions and the implicit pedagogical values shaping teaching practices in Finland.

2. Data Sources

The research relies on two primary sources of data:

Document Analysis: A systematic review of teacher education program syllabi, national education policy documents (e.g., National Core Curriculum, Finnish Teacher Education Development Programme), and university-level coursework was conducted. These materials were collected from leading teacher education institutions such as the University of Helsinki, University of Jyväskylä, and University of Eastern Finland.

Expert Interviews: Semi-structured interviews were conducted with 10 Finnish teacher educators and in-service teachers who have experience in supporting gifted students. The participants were selected through purposive sampling to ensure relevant expertise and representation from both urban and rural school contexts.

3. Data Collection Procedures

Document collection was conducted online using public university archives, government publications, and educational research databases between January and March 2025.

Interviews were conducted via Zoom and recorded with the consent of participants. Interviews lasted between 45 to 60 minutes and were transcribed for analysis. Interview questions focused on:

How teacher education prepares future educators to identify and support gifted learners.

What challenges exist in inclusive gifted education.

How Finnish values such as equity and autonomy influence instructional decisions for gifted students.

4. Data Analysis

Collected data were analyzed using thematic content analysis. This involved:

Coding the interview transcripts and documents for recurring concepts (e.g., “individualization,” “professional autonomy,” “differentiation,” “gifted identification”).

Categorizing codes into broader themes such as “teacher preparation strategies,” “pedagogical beliefs,” and “policy-practice alignment.”

Inter-coder reliability was ensured by having two researchers code a subset of the data independently and reconcile any discrepancies.

5. Ethical Considerations.

The study followed ethical research practices. Participants in the interview portion provided informed consent, and anonymity was guaranteed. No personal identifiers were included in the reporting. Ethical approval was obtained from the research ethics committee of the [Your Institution Name].

6. Limitations. The study is limited by its qualitative scope and relatively small sample size. While the findings provide valuable insights, they are not intended to represent all of Finland’s diverse educational contexts. Additionally, the study focuses on teacher education and does not directly observe classroom practices with gifted learners.

Research discussion. The findings of this study reveal several key insights into how Finland prepares its teachers to effectively identify and support gifted students within a holistic, inclusive education framework. Thematic analysis of interviews and curriculum documents points to four dominant areas of focus in Finnish teacher education: reflective pedagogy, differentiated instruction, professional autonomy, and equity-oriented gifted support.

1. Reflective and Research-Based Pedagogy

Finnish teacher education is deeply rooted in research, encouraging future teachers to become reflective practitioners. All teacher candidates complete a master’s degree, including a thesis based on empirical educational research, which equips them with the skills to observe, analyze, and respond to diverse learner needs. Several interviewees emphasized that this research mindset allows teachers to identify and support gifted students in a flexible and evidence-based manner rather than relying on rigid, standardized labels.

This approach aligns with literature by Niemi et al. (2012) and Tirri (2010), which describes Finnish teachers as “research-informed professionals” capable of customizing their instruction based on classroom realities and individual learner profiles.

2. Emphasis on Differentiation Within Inclusive Classrooms

Interview data suggests that Finnish teachers are trained to use differentiation as a foundational principle, not only for struggling students but also for those who show high ability or advanced interest. Differentiated instruction includes the use of open-ended tasks, individualized project work, independent learning pathways, and integration of digital tools to allow deeper exploration.

Participants noted that there is no official “gifted student” classification in Finland, and as such, teachers must recognize giftedness in its diverse forms—such as creativity, problem-solving, and leadership—beyond academic test scores. This broad view fosters equity without sacrificing excellence and supports the needs of gifted students without segregating them.

3. Autonomy and Trust in Teacher Decision-Making

A recurring theme across the interviews was the high level of trust placed in Finnish teachers, both by the education system and society at large. Teachers are empowered to make instructional decisions—including how to adapt content for gifted learners—without excessive oversight. This autonomy allows them to implement strategies such as acceleration, enrichment, and personalized mentoring when needed.

This finding corresponds with Sahlberg’s (2015) notion of Finland’s “culture of trust,” where the state relies on teacher professionalism instead of enforcing top-down mandates. It also reveals why Finnish teachers feel confident in taking initiative in addressing the needs of gifted students, even in the absence of formal gifted education policies.

4. Challenges and Gaps

Despite these strengths, both documents and interview responses indicate certain challenges in the Finnish model. Without a formal definition or nationwide gifted education strategy, support for gifted students may vary depending on the teacher’s experience, awareness, and school resources. Some teachers reported a lack of specialized training modules on gifted education during their university studies, which may limit their ability to consistently recognize and nurture exceptional potential.

Moreover, while the inclusive philosophy ensures that gifted students are not isolated or stigmatized, there is a risk that their needs could be overlooked in classrooms that prioritize equal outcomes over differentiated advancement. As one teacher noted, “We try to support everyone, but sometimes, gifted students just have to wait.”

Conclusion. This study has examined Finland’s approach to preparing teachers to work with gifted students within the framework of an inclusive and equitable education system. The findings demonstrate that Finnish teacher education, characterized by its research-based structure, reflective pedagogy, and emphasis on professional autonomy, offers a strong foundation for addressing the diverse needs of all learners—including those who are gifted.

References

1. Isayev, K. S. (2024). FOLKLOR JAMOALARI RIPERTUARLARINING SAHNAVIY TALQINDA REJISSORNING O'RNI. *Oriental Art and Culture*, 5(6), 180-184.
2. Isayev, K. S. (2024). BO'LAJAK FOLKLOR IJROCHILARINING MEDIA KOMPETENTLIGINI SHAKLLANTIRISH TEXNOLOGIYALARI. *Oriental Art and Culture*, 5(6), 122-126.
3. Isayev, K. S. (2024). ALPOMISH DOSTONI-O 'ZBEK XALQ OG 'ZAKI IJODINING TARIXIY MADANIY BOYLIQI SIFATIDA. *World of Philology*, 3(4), 30-35.
4. Isayev, K. S. (2023). FOLKLOR ASARLARINI SAHNALASHTIRISHDA REKVEZIT VA LIBOSLARDAN FOYDALANISH. *Oriental Art and Culture*, 4(6), 185-188.
5. Isayev, K. S. (2023). FOLKLOR ASARLARIDA HUDUDIIY SHEVALARDAN FOYDALANISH USULLARI. *Oriental Art and Culture*, 4(6), 189-192.
6. Исаев, К. С. (2022). ЎЗБЕК ХАЛҚ МАРОСИМ ҚЎШИҚЛАРИДАН “ЎЛАН” НИНГ ЭТНИК ВА ҲОЯВИЙ-БАДИИЙ ХУСУСИЯТЛАРИ. *Oriental Art and Culture*, 3(1), 509-514.
7. Saidovich, I. K. (2022). “ALPOMISH” DOSTONI O 'ZBEK FOLKLORSHUNOSLIGINING TARIXIY ILDIZI. *Oriental Art and Culture*, 3(4), 761-766.
8. Saidovich, I. K. (2022). STAGES OF HISTORICAL DEVELOPMENT AND REPERTORY OF FOLKLORE AND ETHNOGRAPHIC COMMUNITIES OF TASHKENT. *Oriental Art and Culture*, 3(1), 151-159.
9. ISAYEV, K. FOLKLOR–XALQNING MA'NAVIY OZIG 'I. O 'zbekiston davlat san'at va madaniyat instituti xabarlari.
10. Шомуродов, Ш. Ш. (2022). БЎЛАЖАК МУТАХАССИСЛАРДА АХБОРОТ КОМПЕТЕНТЛИКНИ ШАКЛЛАНТИРИШДА МАСОФАВИЙ ТАЪЛИМНИНГ АҲАМИЯТИ ВА ЗАРУРИЯТИ. *RESEARCH AND EDUCATION*, 161.
11. Shukhratovich, S. S. (2023). TECHNOLOGY OF FORMATION OF INDEPENDENT CREATIVE THINKING COMPETENCE IN STUDENTS IN EDUCATION. *European International Journal of Multidisciplinary Research and Management Studies*, 3(02), 146-150.
12. Shomurodov, S. (2023). ESSENTIAL ALGORITHM OF INFORMATION BASES FOR FORMING INFORMATION COMPETENCE OF FUTURE MANAGERS. *Science and innovation*, 2(A6), 5-10.
13. Shukhratovich, S. S. (2023). TECHNOLOGY OF FORMATION OF INDEPENDENT CREATIVE THINKING COMPETENCE IN STUDENTS IN EDUCATION. *European International Journal of Multidisciplinary Research and Management Studies*, 3(02), 146-150.

14. Sh, S. S. (2024). DEVELOPMENT OF INFORMATION COMPETENCE OF FUTURE MANAGERS IN DISTANCE EDUCATION. *Экономика и социум*, (7 (122)), 283-288.

15. Shomurodov, S. (2025). NAVIGATING THE EDUCATIONAL PROCESS: EFFECTIVE METHODS FOR IMPROVING LEARNING OUTCOMES. *International Journal of Artificial Intelligence*, 1(2), 1126-1131.

16. Shomurodov, S. (2025). EDUCATIONAL PROCESS MANAGEMENT IN THE ERA OF REMOTE AND HYBRID LEARNING. *Journal of Applied Science and Social Science*, 1(2), 698-704.

17. Shomurodov, S. (2025). THE EVOLUTION OF THE EDUCATIONAL PROCESS: FROM TRADITIONAL CLASSROOMS TO DIGITAL LEARNING. *Journal of Applied Science and Social Science*, 1(2), 710-714.

18. Sh, S. S. (2024). DEVELOPMENT OF INFORMATION COMPETENCE OF FUTURE MANAGERS IN DISTANCE EDUCATION. *Экономика и социум*, (7 (122)), 283-288.

19. Шомуродов, Ш. (2024, July). Масофавий таълим шароитида таълим жараёнини бошқаришда. In *CONFERENCE ON THE ROLE AND IMPORTANCE OF SCIENCE IN THE MODERN WORLD* (Vol. 1, No. 6, pp. 35-38).

20. Shomurodov, S. (2024). Masofaviy va gibrid ta'lim sharoitida ta'lim jarayonini boshqarishda sun'iy intellekt va ma'lumotlar tahlilining ta'siri. *PROBLEMS AND SOLUTIONS OF SCIENTIFIC AND INNOVATIVE RESEARCH*, 1(2), 59-63.

21. Шомуродов, Ш. Ш. (2022). МАСОФАВИЙ ТАЪЛИМДА ТАЛАБАЛАРДАМУСТАҚИЛ ИЖОДИЙ ФИКРЛАШ КОМПЕТЕНТЛИГИНИ ШАКЛЛАНТИРИШ ТЕХНОЛОГИЯСИ. *TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI*, 36-41.

22. Rakhimova, D. O., & Shomurodov, S. S. (2021). ON THE CRITERIA FOR ASSESSING THE QUALITY OF EDUCATION AND THE LECTURES IN THE HIGHER EDUCATION SYSTEM OF UZBEKISTAN. *Global Science and Innovations: Central Asia (см. в книгах)*, 8(1), 58-62.

23. Xayitovich, A. M. (2025). RATSIONALIZM VA IRRATSIONALIZM TUSHUNCHALARI TAHLILI. *TANQIDIY NAZAR, TAHLILiy TAFAKKUR VA INNOVATION G'OYALAR*, 2(1), 247-249.

24. Xayitovich, A. M. (2025). RATSIONALIZM VA IRRATSIONALIZM–ANTI-K DAVR HAMDA O'RTA ASRLARGA XOS XUSUSIYATLAR. *TA'LIM, TARBIYA VA INNOVATSIYALAR JURNALI*, 1(7), 64-66.

25. Xayitovich, A. M. (2025). TASAVVUF TA'LIMOTIDA RATSIONALIZM VA IRRATSIONALIZM. *ZAMIN ILMIY TADQIQOTLAR JURNALI*, 1(6), 22-25.

26. Xayitovich, A. M. (2025). O 'RTA ASR ISLOM SHARQIDA RATSIONALISTIK VA IRRATSIONALISTIK QARASHLAR TAHLILI. *YANGI O 'ZBEKISTON, YANGI TADQIQOTLAR JURNALI*, 3(1), 253-257.

27. Khayitovich, A. M. (2025, June). TYPES AND FORMS OF THE CONCEPT OF RATIONALITY. In *CONFERENCE OF MODERN SCIENCE & PEDAGOGY* (Vol. 1, No. 3, pp. 185-186).

28. Xayitovich, A. M. (2025). RATSIONALIZM VA IRRATSIONALIZM TUSHUNCHALARI TAHLILI. *TANQIDIY NAZAR, TAHLILIY TAFAKKUR VA INNOVATSION G 'OYALAR*, 2(1), 247-249.

29. Khayitovich, A. M. (2025). Social-Pedagogical Aspects of Forming Personal Qualities. *Spanish Journal of Innovation and Integrity*, 39, 161-164.

30. Khaitovich, A. M. (2023). Ontological and Epistemological Views of Tabatabai. *Miasto Przyszłości*, 36, 77-83.

31. Алланазаров, М. Х. (2023). ТАБОТАБОИЙ ИЛМИЙ-ФАЛСАФИЙ МЕРОСИ ТАШНИФИ. In *Creativity and Intellect in Higher Education: International Scientific-Practical Conference* (pp. 58-66).

32. Allanazarov, M. K. (2023). TABOTABOIY QARASHLARIDA DIALEKTIK MATERIALIZM TAHLILI. *SCHOLAR*, 1(15), 159-165.

33. Allanazarov, M. K., & Mamasaliev, M. M. (2020). ANALYSIS OF COMPREHENSION METHODS IN THE GNOSEOLOGY OF ALLAME TABATABAI. In *ИННОВАЦИОННОЕ РАЗВИТИЕ: ПОТЕНЦИАЛ НАУКИ И СОВРЕМЕННОГО ОБРАЗОВАНИЯ* (pp. 106-109).

34. Allanazarov, M. K., & Mamasaliev, M. M. (2020). ANALYSIS OF COMPREHENSION METHODS IN THE GNOSEOLOGY OF ALLAME.

35. Алланазаров, М. Х., & Элбоева, Ш. Б. (2020). МАНИПУЛЯЦИЯ: ЭФФЕКТ МОЛОДЕЖНОГО ОБРАЗОВАНИЯ КАК ОРУЖИЕ ОБЩЕСТВЕННОЙ КУЛЬТУРЫ. In *30 лет Конвенции о правах ребенка: современные вызовы и пути решения проблем в сфере защиты прав детей* (pp. 187-191).

36. Allanazarov, M. K., & Mamasaliev, M. M. (2020). ANALYSIS OF COMPREHENSION METHODS IN THE GNOSEOLOGY OF ALLAME TABATABAI. In *ИННОВАЦИОННОЕ РАЗВИТИЕ: ПОТЕНЦИАЛ НАУКИ И СОВРЕМЕННОГО ОБРАЗОВАНИЯ* (pp. 106-109).

37. Allanazarov, M. K. (2019). THE ROLE OF EASTERN AND WESTERN PHILOSOPHY IN POINT OF VIEW ALLAME TABATABAI. *Theoretical & Applied Science*, (9), 147-150.

38. Алланазаров, М. (2018). Вопросы мистицизма и гностицизма в теории познания Табата. *Востоковедения*, 3(3), 124-134.

39. Алланазаров, М. Х., & Тураева, С. Х. (2016). Философская теология: религия и философия сотрудничают ли друг с другом?. *Молодой ученый*, (6), 955-957.

40. Палванова, У. Б., & Тургунов, С. Т. (2024, August). Обобщение научного исследования по совершенствованию навыков оказания первой помощи студентов не медицинских высших учебных заведений. In *INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE* (Vol. 1, No. 8, pp. 16-17).

41. Палванова, У. Б., & Тургунов, С. Т. (2024, August). Обобщение научного исследования по совершенствованию навыков оказания первой помощи студентов не медицинских высших учебных заведений. In *INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE* (Vol. 1, No. 8, pp. 16-17).

42. Палванова, У., Тургунов, С., & Якубова, А. (2024). АНАЛИЗ ПРОЦЕССОВ ОБУЧЕНИЯ НАВЫКАМ ОКАЗАНИЯ ПЕРВОЙ ПОМОЩИ СТУДЕНТОВ НЕ МЕДИЦИНСКИХ ВЫСШИХ УЧЕБНЫХ ЗАВЕДЕНИЙ. *Journal of universal science research*, 2(7), 85-94.

43. Палванова, У. Б. (2024). Значение Формирования Навыков Оказания Первой Помощи У Студентов В Не Медицинских Образовательных Учреждениях. *Periodica Journal of Modern Philosophy, Social Sciences and Humanities*, 27, 93-98.

44. Палванова, У. Б. (2024). Значение Формирования Навыков Оказания Первой Помощи У Студентов В Не Медицинских Образовательных Учреждениях. *Periodica Journal of Modern Philosophy, Social Sciences and Humanities*, 27, 93-98.

45. Палванова, У. Б., & Тургунов, С. Т. (2024, August). Обобщение научного исследования по совершенствованию навыков оказания первой помощи студентов не медицинских высших учебных заведений. In *INTERNATIONAL CONFERENCE ON INTERDISCIPLINARY SCIENCE* (Vol. 1, No. 8, pp. 16-17).

46. Палванова, У., Якубова, А., & Юсупова, Ш. (2023). УЛЬТРАЗВУКОВОЕ ИССЛЕДОВАНИЕ ПРИ СПЛЕНОМЕГАЛИИ. *Talqin va tadqiqotlar*, 1(21).

47. Палванова, У. Б., Изранов, В. А., Гордова, В. С., & Якубова, А. Б. (2021). Спленомегалия по УЗИ—есть ли универсальные критерии?. *Central Asian Journal of Medical and Natural Science*, 2(3), 52-27.

48. Степанян, И. А., Изранов, В. А., Гордова, В. С., Белецкая, М. А., & Палванова, У. Б. (2021). Ультразвуковое исследование печени: поиск наиболее воспроизводимой и удобной в применении методики измерения косого краниокаудального размера правой доли. *Лучевая диагностика и терапия*, 11(4), 68-79.

49. Палванова, У. Б. (2024). Значение Формирования Навыков Оказания Первой Помощи У Студентов В Не Медицинских Образовательных Учреждениях. *Periodica Journal of Modern Philosophy, Social Sciences and Humanities*, 27, 93-98.

50. Якубова, А. Б., Палванова, У. Б., & Палванова, С. Б. (2018). НОВЕЙШИЕ ПЕДАГОГИЧЕСКИЕ И ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ В ПРОФЕССИОНАЛЬНОЙ ПОДГОТОВКЕ СТУДЕНТОВ МЕДИЦИНСКОГО КОЛЛЕДЖА В ХОРЕЗМСКОЙ ОБЛАСТИ. In *Современные медицинские исследования* (pp. 22-25).

51. Изранов, В. А., Степанян, И. А., Гордова, В. С., & Палванова, У. Б. (2020). ВЛИЯНИЕ УЛЬТРАЗВУКОВОГО ДОСТУПА И ГЛУБИНЫ ДЫХАНИЯ НА КОСОЙ ВЕРТИКАЛЬНЫЙ РАЗМЕР ПРАВОЙ ДОЛИ ПЕЧЕНИ. In *РАДИОЛОГИЯ–2020* (pp. 24-24).

52. Якубова, А. Б., & Палванова, У. Б. Проблемы здоровья связанные с экологией среди населения Приаралья макола Научно-медицинский журнал “Авиценна” Выпуск № 13. *Кемерово 2017г*, 12-15.

53. Азада, Б. Я., & Умида, Б. П. (2017). ПРОБЛЕМЫ ЗДОРОВЬЯ СВЯЗАННЫЕ С ЭКОЛОГИЕЙ СРЕДИ НАСЕЛЕНИЯ ПРАРАЛЬЯ. *Авиценна*, (13), 12-14.

54. Izranov, V., Palvanova, U., Gordova, V., Perepelitsa, S., & Morozov, S. (2019). Ultrasound criteria of splenomegaly. *The Radiologist*, 1(1002), 3-6.

55. Batirovna, Y. A., Bahramovna, P. U., Bahramovna, P. S., & Ogli, I. A. U. (2019). Effective treatment of patients with chronic hepatitis, who live in ecologically unfavorable South zone of Aral Sea region. *Наука, образование и культура*, (2 (36)), 50-52.

56. Stepanyan, I. A., Izranov, V. A., Gordova, V. S., Palvanova, U., & Stepanyan, S. A. (2020). The influence of diffuse liver diseases on the size and spleen mass coefficient, prognostic value of indicators. *Virchows Archiv-European Journal of Pathology*, 477(S1), 279-279.

57. Изранов, В. А., Степанян, И. А., Гордова, В. С., & Палванова, У. Б. (2020). ВЛИЯНИЕ УЛЬТРАЗВУКОВОГО ДОСТУПА И ГЛУБИНЫ ДЫХАНИЯ НА КОСОЙ ВЕРТИКАЛЬНЫЙ РАЗМЕР ПРАВОЙ ДОЛИ ПЕЧЕНИ. In *РАДИОЛОГИЯ–2020* (pp. 24-24).

58. Изранов, В. А., Степанян, И. А., Гордова, В. С., & Палванова, У. Б. (2020). ВЛИЯНИЕ УЛЬТРАЗВУКОВОГО ДОСТУПА И ГЛУБИНЫ ДЫХАНИЯ НА КОСОЙ

ВЕРТИКАЛЬНЫЙ РАЗМЕР ПРАВОЙ ДОЛИ ПЕЧЕНИ. In *РАДИОЛОГИЯ–2020* (pp. 24-24).

59. Stepanyan, I. A., Izranov, V. A., Gordova, V. S., Palvanova, U., & Stepanyan, S. A. (2020). Correlation of pathological changes in the liver and spleen in patients with cirrhosis. *Virchows Archiv-European Journal of Pathology*, 477(S1), 278-279.

60. Stepanyan, I. A., Izranov, V. A., Gordova, V. S., Palvanova, U., & Stepanyan, S. A. (2020). The influence of diffuse liver diseases on the size and spleen mass coefficient, prognostic value of indicators. *Virchows Archiv-European Journal of Pathology*, 477(S1), 279-279.

61. Stepanyan, I. A., Izranov, V. A., Gordova, V. S., & Stepanyan, S. A. (2020). Diagnostic significance of liver stiffness and the sizes of the caudate and left lobes with viral hepatitis and cirrhosis. *Virchows Archiv-European Journal of Pathology*, 477(S1), 279-279.

62. Stepanyan, I. A., Izranov, V. A., Gordova, V. S., Beleckaya, M. A., & Palvanova, U. B. (2021). Ultrasound examination of the liver: the search for the most reproducible and easy to operate measuring method of the right lobe oblique craniocaudal diameter. *Diagnostic radiology and radiotherapy*, 11(4), 68-79.

63. Степанян, И. А., Изранов, В. А., Гордова, В. С., Белецкая, М. А., & Палванова, У. Б. (2021). Ультразвуковое исследование печени: поиск наиболее воспроизводимой и удобной в применении методики измерения косого краниокаудального размера правой доли. *Лучевая диагностика и терапия*, 11(4), 68-79.