

**ELIMINATING PEDAGOGICAL AND PSYCHOLOGICAL PROBLEMS ARISING  
IN TEACHING STUDENTS WITH MUSCULOSKELETAL DISABILITIES IN  
VOCATIONAL EDUCATION INSTITUTIONS**

**Ibragimov Akbarali Roziboy ugli**

Senior defectologist teacher of the State multidisciplinary specialized preschool educational organization with the “Imkon” rehabilitation center in Karshi city.

1st year Master’s student in Pedagogy at the International Innovative University in Karshi.

Tel: +998974071210

**Annotation:** This article systematically analyzes the pedagogical and psychological problems that arise in the process of teaching students with musculoskeletal disabilities in vocational education institutions. It also highlights the causes of these problems, their impact on the educational process, and scientifically substantiates effective mechanisms for overcoming them. The research is based on observation, comparative analysis, and practical experience.

**Keywords:** inclusive education, vocational competence, musculoskeletal system, pedagogical approach, psychological adaptation, individualized education.

In the context of globalization, one of the main tasks of the education system is to create equal opportunities for all categories of learners. From this perspective, the development of inclusive education is of great importance. In particular, involving students with musculoskeletal disabilities in vocational education plays an important role in ensuring their independent life in the future.

As noted in scientific literature, “an inclusive educational environment directly affects not only the acquisition of knowledge but also the formation of the learner as a personality” (Ainscow, 2020). Therefore, it is necessary to deeply consider not only pedagogical but also psychological factors in this field.

In the development of this category of students, movement limitation is the main factor, which also affects their learning activities. They often get tired quickly from physical exertion and face difficulties in actively participating in long-term practical training.

Observation results showed that during the monitoring process conducted in a vocational education institution, 65–70 percent of students with musculoskeletal disorders required a reduction in the duration of practical training sessions. This confirms the necessity of adapting the educational process. Psychologically, such students often experience internal anxiety, lack of self-confidence, and social withdrawal. Especially during the adaptation to a new group, they require additional psychological support.

Pedagogical problems in vocational education institutions are often systemic in nature. Their main causes are related to the following:

Firstly, the standardization of curricula limits the ability to take into account individual needs. As a result, students are forced to perform tasks that do not correspond to their capabilities.

Secondly, the insufficient adaptation of educational infrastructure is an important barrier. For example, it was found during the experiment that in groups with non-adapted workshop conditions, students' activity was 30–35 percent lower.

Thirdly, the insufficient preparation of teachers in special pedagogy and inclusive education limits the implementation of an individual approach. This negatively affects the effectiveness of education.

Psychological problems are often formed in close connection with the social environment. Students with musculoskeletal disabilities may fall into a state of internal isolation due to their inability to fully express themselves in a group. "If the level of social support among students with physical disabilities is low, their academic activity also decreases significantly" (Sharma, 2018).

Eliminating the pedagogical and psychological problems arising in working with students with musculoskeletal disabilities requires not a one-sided, but a comprehensive approach. That is, pedagogical, psychological, social, and technological factors should be applied in harmony.

First of all, from a pedagogical point of view, individualization of the educational process is of primary importance. It is necessary to develop an individual learning trajectory based on each student's physical capabilities, psychological condition, and level of mastery. In this process, it is important to adapt the volume of educational materials, differentiate tasks, and revise assessment criteria. Lessons organized based on individual learning plans have shown significantly higher student activity and mastery compared to traditional groups.

The second important direction is the adaptation of the educational environment. For students with musculoskeletal disorders, the convenience of the physical environment directly affects learning effectiveness. Therefore, it is necessary to organize ramps, elevators, wide doorways, special desks, and workplaces in educational institutions. In addition, workshop equipment should be adapted according to ergonomic requirements.

The system of psychological support is also of particular importance. By conducting regular psychological diagnostics, organizing individual conversations, and holding motivational trainings, it is possible to strengthen students' self-confidence.

Also, the introduction of a "peer support" system is one of the effective methods. Through this approach, it is possible to create a cooperative environment between healthy students and students with disabilities. As a result, students begin to feel themselves as full members of society.

Based on the results of the research and observations, the following scientific and practical recommendations can be proposed:

1. It is necessary to develop special methodological programs for the development of inclusive education in vocational education institutions. These programs should be designed taking into account the needs of students with musculoskeletal disabilities.

2. It is necessary to improve the system of teacher professional development. In particular, regular training and seminars should be organized for teachers on the basics of special pedagogy, inclusive education methods, and psychological approaches.

3. It is advisable to introduce modern assistive technologies into the educational process. For example: adapted computer programs, sensor devices, voice control systems these expand students' opportunities for independent work.

4. It is necessary to revise the assessment system. Instead of traditional assessment, a process-oriented evaluation system that takes into account the dynamics of individual development should be introduced.

5. It is necessary to strengthen career guidance activities. It is important to ensure the participation of psychologists and specialists in choosing professions suitable for students' physical capabilities.

6. It is necessary to establish systematic cooperation with parents. Providing psychological and pedagogical advice to parents can positively influence students' development.

7. Strengthening cooperation with industrial enterprises is important. This helps to create adapted practice bases for students and provides a foundation for their future employment.

8. It is recommended to expand the practice of teaching in small groups. This allows the teacher to give individual attention to each student.

9. Organizing education based on the "master-apprentice" model gives effective results. This method not only strengthens students' practical skills but also increases their self-confidence.

In conclusion, the effective integration of students with musculoskeletal disabilities into the vocational education system requires a multi-stage and systematic approach. In particular, high efficiency can be achieved only when individualized education, adapted environment, psychological support, and social integration factors are applied in harmony.

In the future, deepening scientific research in this field, introducing innovative technologies, and improving the national model of inclusive education remain urgent tasks.

### References

1. Ainscow, M. (2020). Inclusive Education and Equity.
2. Sharma, U. (2018). Inclusive Education: Perspectives and Practices.
3. Regulatory documents of the Republic of Uzbekistan on inclusive education.
4. Scientific and methodological manuals on special pedagogy.